

Solicitation Information September 23, 2016

RFP# 7550978

Title: Data Vendor for the Rhode Island All-Payer Claims Database

Submission Deadline: October 21, 2016 at 10:00 (Eastern Time)

PRE-BID/ PROPOSAL CONFERENCE: NO

Questions concerning this solicitation must be received by the Division of Purchases at David.Francis@purchasing.ri.gov no later than **October 3, 2016 at 10:00 (ET).** Questions should be submitted in a *Microsoft Word attachment*. Please reference the RFP# on all correspondence. Questions received, if any, will be posted on the Internet as an addendum to this solicitation. It is the responsibility of all interested parties to download this information.

David J. Francis Interdepartmental Project Manager

Applicants must register on-line at the State Purchasing Website at www.purchasing.ri.gov

Note to Applicants:

Offers received without the entire completed three-page RIVIP Generated Bidder Certification Form attached may result in disqualification.

THIS PAGE IS NOT A BIDDER CERTIFICATION FORM

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SECTION 1: INTRODUCTION

The Rhode Island Department of Administration/Division of Purchases, on behalf of the Rhode Island Executive Office of Health and Human Services (EOHHS), is soliciting proposals from qualified firms to provide secure lockbox services, data collection and aggregation, claims editing and processing, and analytics for the Rhode Island All-Payer Claims Database (RI APCD), in accordance with the terms of this Request for Proposals and the State's General Conditions of Purchase, which may be obtained at the Rhode Island Division of Purchases Home Page by Internet at www.purchasing.ri.gov.

The State intends to award a single contract to a vendor and such subcontractors as needed to fully deliver the services and deliverables described in this RFP (see Appendix 1 for sample base contract).

The initial contract period will begin on approximately January 1, 2017, and will continue through December 31, 2018. Contracts may be renewed for up to three additional 12-month periods based on vendor performance and the availability of funds.

This is a Request for Proposals, not an Invitation for Bid. Responses will be evaluated on the basis of the relative merits of the proposal, in addition to price; there will be no public opening and reading of responses received by the Division of Purchases pursuant to this Request, other than to name those bidders who have submitted proposals.

Eligibility to Bid

Public agencies, private for-profit companies, and non-profit companies and institutions that have successfully collected, aggregated and analyzed multi-payer claims data, including implementation of actionable data through role-based business intelligence tools, are invited to submit proposals in response to this RFP.

INSTRUCTIONS AND NOTIFICATIONS TO BIDDERS:

- 1. Vendors are advised to review all sections of this RFP carefully and to follow instructions completely, as failure to make a complete submission as described elsewhere herein may result in rejection of the proposal.
- 2. Alternative approaches and/or methodologies to accomplish the desired or intended results of this procurement are solicited. However, proposals which depart from or materially alter the terms, requirements, or scope of work defined by this RFP will be rejected as being non-responsive.
- 3. All costs associated with developing or submitting a proposal in response to this RFP, or to provide oral or written clarification of its content shall be borne by the vendor. The State assumes no responsibility for these costs.
- 4. Proposals are considered to be irrevocable for a period of not less than 180 days following the opening date and may not be withdrawn, except with the express written permission of the State Purchasing Agent.
- 5. All pricing submitted will be considered to be firm and fixed unless otherwise indicated herein.
- 6. Proposals misdirected to other state locations, or which are otherwise not present in the Division at the time of opening for any cause will be determined to be late and will not be considered. For the

- purposes of this requirement, the official time and date shall be that of the time clock in the reception area of the Division.
- 7. It is intended that an award pursuant to this RFP will be made to a single prime ("main") vendor, who will assume responsibility for all aspects of the work. As outlined in this RFP, Subcontractor(s) are required, and their use should be clearly indicated in the prime vendor's proposal along with the identification of the subcontractor(s) to be used.
- 8. All proposals should include the vendor's FEIN or Social Security number as evidenced by a W9, downloadable from the Division's website at www.purchasing.ri.gov.
- 9. The purchase of services under an award made pursuant to this RFP will be contingent on the availability of funds.
- 10. Vendors are advised that all materials submitted to the State for consideration in response to this RFP will be considered to be Public Records as defined in Title 38, Chapter 2 of the General Laws of Rhode Island, without exception, and will be released for inspection immediately upon request once an award has been made.
- 11. Interested parties are instructed to peruse the Division of Purchases website on a regular basis, as additional information relating to this solicitation may be released in the form of an addendum to this RFP.
- 12. The State reserves the right to require vendors who submit a response to this RFP to make an onsite oral presentation to the RFP Technical Review Committee. Oral presentations will be evaluated and may be limited in duration, at EOHHS's sole discretion.
- 13. Equal Employment Opportunity (G.L. 1956 § 28-5.1-1, et seq.) § 28-5.1-1 Declaration of policy (a) Equal opportunity and affirmative action toward its achievement is the policy of all units of Rhode Island state government, including all public and quasi-public agencies, commissions, boards and authorities, and in the classified, unclassified, and non-classified services of state employment. This policy applies to all areas where State dollars are spent, in employment, public services, grants and financial assistance, and in state licensing and regulation.
- 14. In accordance with Title 7, Chapter 1.2 of the General Laws of Rhode Island, no foreign corporation, a corporation without a Rhode Island business address, shall have the right to transact business in the State until it shall have procured a Certificate of Authority to do so from the Rhode Island Secretary of State (401-222-3040). This is a requirement only of the successful vendor(s).
- 15. Vendors should be aware of the State's Minority Business Enterprise (MBE) requirements, which address the State's goal of ten percent (10%) participation by MBEs in all State procurements. For further information, visit the website www.mbe.ri.gov.
- 16. Under HIPAA, a "business associate" is a person or entity, other than a member of the workforce of a HIPAA covered entity, who performs functions or activities on behalf of, or provides certain services to, a HIPAA covered entity that involves access by the business associate to HIPAA protected health information. A "business associate" also is a subcontractor that creates, receives, maintains, or transmits HIPAA protected health information on behalf of another business associate. The HIPAA rules generally require that HIPAA covered entities and business associates enter into contracts with their business associates to ensure that the business associates will

appropriately safeguard HIPAA protected health information. Therefore, if a Contractor qualifies as a business associate, it will be required to sign a HIPAA business associate agreement.

SECTION 2: DEFINITIONS

Wherever used in this RFP, these terms shall mean the following:

- "Analytic Vendor" means a vendor selected by the State that has a contract to act on behalf of the State to analyze and apply value-adds to health care claims data collected by the RI APCD.
- "Business Intelligence Tool" means a type of application software designed to retrieve, analyze, transform and report data. Business intelligence tools typically read data stored in a data warehouse or data mart.
- "Data Aggregator" means a vendor selected by the State that has a contract to act on behalf of the State to collect, clean, and aggregate health care claims data collected by the RI APCD.
- "De-identified health information" means information that does not identify an individual patient, member or enrollee. De-identification means that such health information shall not be individually identifiable and shall require the removal of direct personal identifiers associated with patients, members or enrollees.
- "Direct Personal Identifier" means any information, as to a member, other than case or code numbers used to create anonymous or encrypted data that plainly discloses the identity of an individual, including:
- (a) Names;
- (b) Business names when that name would serve to identify a person;
- (c) Elements of patient birth dates, except for year of birth or year of birth within an age band;
- (d) Postal address information other than town or city, state and 5-digit ZIP code;
- (e) Specific latitude and longitude or other geographic information that would be used to derive postal address:
- (f) Telephone and fax numbers;
- (g) Electronic mail addresses;
- (h) Social Security numbers;
- (i) Vehicle identifiers and serial
- (i) Medical record numbers;
- (k) Health plan beneficiary numbers;
- (1) Patient account numbers;
- (m) Personal Internet protocol (IP) addresses and uniform resource locators (URL), including those that identify a business that would serve to identify a person;
- (n) Biometric identifiers, including finger and voice prints; and
- (o) Personal photographic images;
- (p) Any other unique patient identifying number, characteristic, but not including the Encrypted Unique Identifier.
- "Encrypted unique identifier" means a code or other means of record identification to allow each patient, member or enrollee to be tracked across the data set, including across payers and over time, without revealing direct personal identifiers. Encrypted unique identifiers are assigned to each patient, member or enrollee in order that all direct personal identifiers can be removed from the data when data is submitted. Using the encrypted unique identifier, all records relating to a patient, member or enrollee can be linked for analytical, public reporting and research purposes without identifying the patient, member or enrollee.
- "Health care provider" means any person or entity licensed to provide or lawfully providing health care services, including, but not limited to, a physician, hospital, intermediate care facility or other health care facility, dentist, nurse, optometrist, podiatrist, physical therapist, psychiatric social worker, pharmacist or

psychologist, and any officer, employee, or agent of that provider acting in the course and scope of his or her employment or agency related to or supportive of health care services.

- "HIPAA" means the Health Insurance Portability and Accountability Act of 1996, as amended, and its implementing regulations (45 CFR Parts 160-164).
- "Insurer" means any entity subject to the insurance laws and regulations of Rhode Island, that contracts or offers to contract to provide, deliver, arrange for, pay for, or reimburse any of the costs of health care services, including, without limitation, an insurance company offering accident and sickness insurance, a health maintenance organization, as defined by RIGL §27-41-1, a nonprofit hospital or medical service corporation, as defined by RIGL §§ 27-19 and 27-20, or any other entity providing a plan of health insurance or health benefits. For the purpose of these Regulations, a third-party payer, third-party administrator, or Medicare or Medicaid health plan sponsor is also deemed to be an *Insurer*.
- "Lockbox Services Vendor" means a vendor selected by the State that is subcontracted to the main Data Management Vendor to act on behalf of the State to perform lockbox functions. These lockbox functions include managing the member opt-out process and maintaining a Master Person Index. RI Rules and Regulations dictate that neither the State nor any one vendor may have access to both patient identifiers and health claims data. Therefore, a separate Lockbox Services Vendor is necessary in order to securely handle the patient identifiers, creating a hashed unique member ID, so that the de-identified data can be sent to the main Data Management Vendor for inclusion in the RI APCD.
- "Medical claims file" means all submitted and non-denied adjudicated claims for each billed service paid by an Insurer as defined in §1.18 on behalf of a Member as defined in §1.20 regardless of where the service was provided. This data file includes but is not limited to service level remittance information including, but not limited to, member encrypted unique identifier, provider information, charge/payment information, and clinical diagnosis/procedure codes as will be described further in the RIAPCD Technical Specification Manual.
- "Member" means a Rhode Island resident who is a subscriber and any spouse or dependent who is covered by the subscriber's policy under contract with an Insurer. The term also includes members of a small employer health insurance plan as defined by RIGL §27-50-3 regardless of the state of residency of the member.
- "Member eligibility file" means a data file composed of demographic information for each individual member eligible for medical or pharmacy benefits as specified in the RIAPCD Technical Specification Manual, for one or more days of coverage at any time during the reporting month.
- "Pharmacy claims file" means a data file composed of service-level remittance information including, but not limited to, member demographics, provider information, charge/payment information, and national drug codes from all submitted and non-denied adjudicated claims for each prescription filled.
- "Project Management Vendor" means a vendor selected by the State that has a contract to act on behalf of the State to oversee the RI APCD and to perform project management duties not limited to facilitating meetings, managing the various RI APCD data vendors, assisting the State with preparing RI APCD reports, and providing subject matter expertise on APCD operations and reporting.
- "Rhode Island All-Payer Claims Database" or "RI APCD" means a health care quality and value database for the collection, management and reporting of eligibility, claims and provider data submitted pursuant to RIGL Chapter 23-17.17.

SECTION 3: BACKGROUND

Background

The Rhode Island All-Payer Claims Database (RI APCD), publicly known as "HealthFacts RI", is a large-scale database that collects and aggregates enrollment, medical claims, pharmacy claims, and provider data from private (e.g. commercial insurers) and public payers (e.g. Medicare and Medicaid) in Rhode Island. The data vendor solicited in this RFP shall provide professional services to maintain the RI APCD infrastructure, operations, and functionality. This includes, but is not limited to: managing the member opt-out process and maintaining a Master Patient Index; performing front-end data collection and aggregation; processing the data and enhancing it with value-added components; providing analytics in support of the data release process and other state initiatives; and mapping the data accurately and consistently to a state-hosted business intelligence tool within the State Data Center environment.

In early 2015, Rhode Island was awarded a State Innovation Model (SIM) Test award from the Centers for Medicare and Medicaid Services (CMS). Rhode Island's SIM Model Test Proposal effectively meets the premise on which the national SIM effort is based: "... state innovation with broad stakeholder input and engagement, including multi-payer models, will accelerate delivery system transformation to provide better care at lower costs." Rhode Island state government is committed to fulfilling our potential to be an essential and effective partner to the federal government and other health care payers to transform the health care delivery system, to decrease per capita health care costs in Rhode Island, and to improve the Rhode Island's population health.

The RI APCD aligns with the guiding principles of the state's SIM Operational Plan and Population Health Plan. In support of improved health for all Rhode Islanders, both the SIM Operational Plan and Population Health Plan seek to:

- 1. Make investments that better integrate behavioral health and physical health.
- 2. Change the focus of the health care payment system toward value and less on volume.
- 3. Increase use of data to provide feedback to policy makers, providers and consumers about quality of care, outcomes and cost/benefits of specific health care interventions.
- 4. Address the social and environmental determinants that affect the overall health of individuals.
- 5. Empower consumers, both individuals and families, to assume greater control and choice over their own health care.
- 6. Support health care providers who are embarking on practice transformations that emphasize value over volume and providing services in the least restrictive settings possible (such as community-based versus hospital interventions).
- 7. Identify and address disparities in health outcomes across various population groups or communities.

Overview of the RI APCD

In 2008, the Rhode Island General Assembly enacted Chapter 23-17.17-9, *Health Care Quality and Value Database*. This law directed the Rhode Island Department of Health (RIDOH) to establish and maintain the RI APCD, and gave RIDOH the authority to require payers, both public and private, to provide personlevel claims data for health services paid on behalf of enrollees.

¹ State Innovation Models: Round Two of Funding for Design and Test Assistance Cooperative Agreement Initial Announcement Funding Opportunity Number: CMS-1G1-14-001, page 2.

In July 2013, RIDOH promulgated the Rules and Regulations Pertaining to the RI APCD ("Regulations").² These Regulations established the framework for the submission of health care claims data to the RI APCD, and detailed the process for the release of RI APCD information to other state agencies, organizations, and individuals engaged in improving, evaluating, or otherwise measuring healthcare. Data submission to the RI APCD began in the fall of 2014, with the collection of three years' worth of historic data (2011-2013) from the nine largest RI payers (seven commercial plans, Medicare, and Medicaid). Since then, the RI APCD has expanded with the addition of two new commercial submitters and subsequent years of data.³ As of June 2016, the approximate size of the RI APCD is as follows:

Years of Data Included	2011-2015
Claims Received Each Year	60 million
Total Number of Claims in Database	300 million
Unique Covered Lives in Database	1.03 million
Total Number of Records in Database (incl. enrollment and provider records)	475 million
Database Size	1.2TB

RI APCD Lockbox Services and Opt-Out Provision

To comply with State law which requires that health care claims information collected by the RI APCD be *de-identified*, RI uses a Lockbox Services Vendor. The Lockbox Services Vendor is responsible for building and maintaining a Master Patient Index - an unduplicated list of all individuals whose data is included in the RI APCD, and for assigning Encrypted Unique Identifiers (also known as "Unique Member IDs"). In order to accomplish this, the Lockbox Services Vendor receives monthly enrollment data from all RI APCD data submitters, which includes direct patient identifiers (e.g. name, address, date of birth, social security number, etc.).⁴ The Lockbox Services Vendor uses this enrollment data to identify individuals across data submitters and to assign RI APCD-specific Unique Member IDs. The Lockbox Services Vendor then sends the enrollment data back to each data submitter, with the Unique Member IDs and opt-out status (see paragraph below) appended. Data submitters use the Unique Member ID in lieu of any direct identifiers in the health care claims data sent to the RI APCD.

Under RI APCD Regulations, individuals can also choose to withhold their information (albeit, deidentified) from submission to the RI APCD. This is known as the "opt-out provision". To help data submitters implement this requirement, the Lockbox Services Vendor hosts and manages a centralized opt-out website (https://www.riapcd-optout.com/) where individuals can register their opt-out choice. This website is available 24/7; individuals can opt-out (i.e. exclude their information from the RI APCD going forward) and opt-back-in anytime. Under this framework, data submitters' responsibility lies in notifying all members of their right to opt-out, in providing the URL for the opt-out website, and in maintaining each member's opt-out status based on flagging supplied by the Lockbox Services Vendor.

The Lockbox Services Vendor assigns each individual one of the following opt-out statuses. Data submitters use these statuses to determine which members' data should be excluded from submissions to the RI APCD:

• "O" for "Opt-Out". These members have opted out;

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² http://sos.ri.gov/documents/archives/regdocs/released/pdf/DOH/7305.pdf

³ Because some payers submit data from different business lines or platforms, the 11 existing payers submit 16 separate submission "streams".

⁴ The Lockbox Services Vendor does not receive any health care claims data from submitters.

- "I" for "Include". These members have not opted out; or
- "U" for "Unknown". These members were included in historic file submissions (2011 2013 in most instances) but were not active members when opt-out notifications began in early 2014 and, therefore, were not notified of the opportunity to opt-out.

Data submitters only submit administrative fields for members flagged as "O", whereas they submit full enrollment and claims data for members flagged as "I". Although data submitters send full enrollment and claims data for members flagged as "U", this data is held and not included in the fully processed RI APCD data used for analytics or reporting. In the event that a member flagged as "U" enrolls in new coverage with a current RI APCD data submitter, the Lockbox Services Vendor is able to match the member to their historic enrollment data and change that member's opt-out status to "O" or "I", the latter of which would allow that individual's data to be included in analytics and reporting.

RI APCD Data Submission Guide and Timeline

Incorporated into the Regulations by reference, the Technical Specifications Manual (TSM) details the specific data elements and the configuration of files that data submitters must send to the RI APCD.⁵ The timeline for RI APCD data submissions can also be found in the TSM, as well as in *Exhibit A: Data Submission and Collection Schedule*.

RI APCD Governance

The RI APCD implementation is managed by a state Interagency Staff Workgroup (ISW); a governing body with representatives from RIDOH, EOHHS, the RI Office of the Health Insurance Commissioner (OHIC), and the RI Health Benefits Exchange (HealthSourceRI or HSRI). These four agencies have committed staff and funding resources to the project and have entered into a formal partnership through a Memorandum of Understanding. Freedman HealthCare currently serves as the RI APCD Project Management Vendor, a role which includes facilitating the ISW meetings, managing RI APCD data vendors and data release processes, and providing subject matter expertise on RI APCD operations and reporting.

Purposes and Major Uses of the RI APCD

The RI APCD was created to ensure transparency of information about access, quality, utilization, efficiency, and cost of RI's health care delivery system. Specifically, the goals of the RI APCD include:

- Providing information about health care utilization and costs to inform statewide decisions on improving access, quality, efficiency, and affordability of healthcare;
- Identifying the major health care cost drivers in Rhode Island;
- Providing EOHHS with information necessary to evaluate and improve the RI Medicaid program, including: meeting CMS' Medicaid Access Monitoring Review requirements, evaluating reform efforts, including long-term care rebalancing, the Accountable Entities program, and "Reinventing Medicaid" program goals; assessing care coordination and access for Dual Eligible populations; and analyzing utilization patterns pre- and post-Medicaid coverage;

5 Version 1.5 of the TSM can be found on the RI APCD website at: http://www.health.ri.gov/programs/detail.php?pgm_id=117. See link at bottom of website, labeled "All-Payer Claims Database Technical Specifications".

- Informing RI Medicaid's health insurance purchasing decisions and affordability standards;
- Enabling the evaluation of new healthcare programs and initiatives, such as the Rhode Island Care Transformation Collaborative (CTC);
- Supporting the goals of the State Innovation Model (SIM) Test grant, which include implementing an outcomes-oriented and delivery-based health care delivery system in order to increase quality of care and decrease healthcare costs for Rhode Islanders; and
- Providing information to researchers, payers, and others in order to improve healthcare value and outcomes.

Data Release

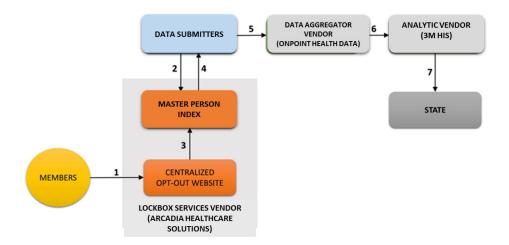
There are three levels of RI APCD data anticipated to be available for release. Level 1 consists of population-based views which are publicly available on the HealthFacts RI website in the form of reports and their associated datasets (http://www.health.ri.gov/data/healthfactsri/). Publicly available reports are released several times a year and are developed by the ISW using data collected by the RI APCD. The reports currently available on the HealthFacts RI website include:

- Potentially Preventable Emergency Room Visits
- A Preliminary Look at Chronic Conditions in Rhode Island
- Potentially Preventable Readmissions Related to Behavioral Health

In addition to publicly available reports and datasets, the State intends to release two levels of custom, not otherwise publicly available, data through a data release process governed by a Data Release Review Board, as specified in the Regulations. Level 2 data sets will consist of summary data which adheres to CMS's cell-size suppression rules. These data sets will be developed by state analysts using data collected by the RI APCD. Level 3 data will include claims-level data. These datasets will be developed by the RI APCD data vendor. Application materials for Level 2 and 3 datasets are anticipated to be made available by the end of 2016.

Current vs. Future RI APCD Data Flow

The various data tasks associated with implementing the RI APCD have historically been performed by three vendors. The diagram below depicts how data *currently* flows through the RI APCD.



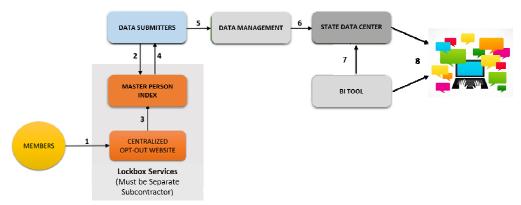
- 1. Covered members (of RI APCD data submitters) who choose to opt-out of the database visit the centralized opt-out website, hosted and managed by the Lockbox Services Vendor.
- 2. Data submitters send enrollment files with direct patient identifiers to the Lockbox Services Vendor, who builds the Master Patient Index.
- 3. The Lockbox Services Vendor collects opt-out information from the opt-out website and matches the names with the Master Patient Index.
- 4. The Lockbox Services Vendor sends enrollment files back to payers, attaching the Unique Member ID and opt-out statuses.
- 5. Data submitters send de-identified claims files for all members who have not opted-out, to the Data Aggregator.
- 6. Data Aggregator combines healthcare claims from all data submitters and sends an aggregated data extract to the Analytic Vendor.
- 7. The Analytic Vendor hosts the RI APCD data, adds value-added data elements, runs additional quality checks, and makes the data available to the State via a proprietary business intelligence tool.

In an effort to integrate the RI APCD into a larger state data enterprise, leverage existing state resources, and create synergy with Medicaid initiatives and systems, the RI APCD is transitioning to a new model.

As described in detail throughout this RFP, the RI APCD data model will change in the following notable ways:

- Going forward, RI APCD data will be stored and hosted within the RI State Data Center, allowing the state direct access to the data and enabling future integration with other state data systems;
- A single RI APCD data vendor contract will be awarded (to a prime vendor with subcontractors);
- To promote streamlined access and use, the data vendor will map RI APCD data to a state-licensed business intelligence tool (Cognos Analytics or Tableau).

The diagram below depicts the new RI APCD data model solicited through this RFP.



- 1. Covered members (of RI APCD data submitters) who choose to opt-out of the database visit the centralized opt-out website, hosted and managed by the Lockbox Services Vendor.
- 2. Data submitters send enrollment files with patient identifiers to the Lockbox Services Vendor (a subcontractor to the prime RI APCD data vendor), which builds the Master Patient Index.
- 3. The Lockbox Services Vendor collects opt-out information from the opt-out website and matches the names with the Master Patient Index.
- 4. The Lockbox Services Vendor sends enrollment files back to payers, attaching the Unique Member ID and flagging opt-outs.
- Data submitters send de-identified claims files for all members who have not opted-out, to the RI
 APCD data vendor who performs Data Management tasks, which now include: combining claims
 across all data submitters, adding all value-added data elements, and running all quality assurance
 checks.
- 6. The RI APCD data vendor sends a fully-processed and enhanced data extract to the State Data Center. The State Data Center stores and hosts the RI APCD data.
- 7. Working within the State Data Center environment, the RI APCD data vendor maps the RI APCD data to a state-licensed business intelligence tool and updates the tool as needed.
- 8. State analysts can access RI APCD data directly within the State Data Center environment (through SQL) or through the business intelligence tool.

Minimum Requirements

EOHHS seeks to obtain the services of a qualified vendor with expertise in data aggregation, data management, quality assurance, and analytics (including mapping to analytic platforms) of large claims databases. Specifically, the successful prime vendor and its subcontractor(s) must collectively demonstrate:

- Experience linking individuals across health insurers to create an unduplicated unique member file:
- At least five (5) years of experience collecting claims information from health insurers;
- At least five (5) years of claims analytics experience;
- Expertise in data collection, data validation, and quality assurance;
- Expertise in the development of aggregated and enhanced datasets (including using and implementing value-added components such as episode groupers, patient-level risk scores, etc.);
- Experience applying and using open-source and proprietary software, including 3M grouper software (APR DRGs, CRGs, EAPGs, etc.);
- At least three (3) years of experience mapping health care claims data to Cognos Analytics, Tableau, or other business intelligence tools to support role-based self-service analytics.

SECTION 4: SCOPE OF WORK

General Scope of Work

EOHHS seeks to obtain the services of a vendor who has the capacity and technical expertise to perform all RI APCD aggregation, data enhancement, and analytic functions as outlined in this RFP. This includes, but is not limited to: managing the opt-out process and building and maintaining a Master Patient Index; performing front-end data collection and aggregation; enhancing the data with value-added elements; producing and securely transmitting fully-processed, analytic-ready extracts to the State Data Center; performing ad hoc queries against RI APCD data as needed; providing analytics in support of RI state initiatives; and mapping the fully-processed data within the State Data Center environment to Cognos Analytics or Tableau (both owned and hosted by the State), including periodic updates and maintenance. For this RFP, EOHHS is particularly interested in bidders that demonstrate the experience and expertise to "hit the ground running" by continuing data collection operations with minimal disruption to data submitters and by providing accurate and timely RI APCD data aggregation, analytic, and business intelligence (BI) tool mapping services.

In order to meet these objectives, the data vendor shall work closely with EOHHS, the ISW, the RI APCD Project Management Vendor, and additional stakeholders on fulfilling the requirements of the following domains. EOHHS will award a single contract for all work outlined in this RFP. Vendors must partner with a subcontractor to perform the work outlined in Domain Two: Lockbox Services, and are encouraged to partner with additional qualified subcontractors, if and where appropriate.⁶

Bidders must bid on all domains.⁷

- Domain One: Transition and Project Management
 - o 1A: Transition
 - o 1B: Project Management and Documentation
- Domain Two: Lockbox Services
 - o 2A: Opt-Out Portal Hosting and Operations
 - o 2B: Master Patient Index
- Domain Three: Data Management
 - o 3A: Data Collection and Aggregation
 - o 3B: Data Infrastructure and Enhancement
 - o 3C: Data Extracts and Analytic Support
- Domain Four: Business Intelligence Tool and Technical Support
 - o 4A: BI Tool Mapping
 - o 4B: Technical Support

⁶ The Regulations stipulate that identified data may not be collected by the APCD. Therefore, Lockbox Services must be performed by a separate and distinct entity other than the vendor that collects and/or processes RI APCD claims data through a subcontracted arrangement with the prime vendor.

⁷ Domain Five: Special Projects/Enhancements of this RFP will be implemented at the State's request after the contract is issued, and will require a formal change order issued by the Division of Purchases.

The required tasks associated with these four domains are described below and should be cross-referenced with *Exhibit A: Data Submission and Collection Schedule* and *Exhibit B: Milestones Schedule*.

The selected data vendor must also comply with the Service Level Requirements found in *Exhibit C:* Service Level Requirements.

Domain One: Transition and Project Management

The selected data vendor must have the ability to quickly and efficiently take over all RI APCD data functions in order to meet the deadlines set forth in *Exhibit A: Data Submission and Collection Schedule* and *Exhibit B: Milestones Schedule*. As part of these transition services, the vendor shall develop and implement a comprehensive Transition Plan, which includes all necessary transition activities to "hit the ground running" on Domains Two, Three, and Four.

In addition, the vendor shall be responsible for implementing an effective project management strategy and providing all necessary project documentation at the beginning of the project, including annual updates thereafter. Project documents include the Project Plan, Business Rules Document, and Data Quality Plan, and will be subject to the state's approval.

Description of Domain One Tasks

Task 1A: Transition

- 1) **Transition Plan:** Develop and deliver a comprehensive Transition Plan which details the activities needed in order to take over data collection, aggregation, and processing from the existing RI APCD data vendors, by the dates specified in *Exhibit A: Data Submission and Collection Schedule* and *Exhibit B: Milestones Schedule*. The existing Lockbox Services and Data Aggregator vendors will continue to intake files directly from data submitters through the September 2016 submission. At a minimum, the Transition Plan must outline plans to:
 - a. Develop and implement a secure data exchange mechanism with the existing Lockbox Services Vendor, if applicable, in order to receive the following:
 - i. Current version of the Master Patient Index, including all Unique Member IDs and current opt-out status;
 - ii. Any internal quality reports generated to validate the current Master Patient Index;
 - iii. All historical enrollment files (2011-current), as they were received from data submitters;
 - iv. Copies of all response files sent back to data submitters; and
 - v. Transfer of domain ownership for the opt-out website, including transfer of ownership of the official domain as well as several other similarly named domains, which automatically redirect to the official opt-out website.
 - b. Develop and implement a secure data exchange mechanism with the existing Data Aggregator Vendor, if applicable, in order to receive the following files:
 - Inventory of all current data submitters, including: product name(s), NAIC number, contact information, types of files being submitted, member counts, number of records, total dollar amount of annual claims, element-specific waivers, etc.;

- ii. All historical RI APCD data (2011-3Q2016), including both the raw unprocessed data as received from data submitters, as well as the processed data extracts that were historically sent to the Analytic Vendor;
- iii. All Medicare claims files received from CMS;
- iv. List of all data intake checks performed on incoming data;
- v. A Data Dictionary which includes a full description of each element in the processed data extracts and how they were derived;
- vi. Copies of all data quality reports sent back to data submitters;
- vii. Copies of all quarterly data quality reports sent to the State; and
- viii. All waivers submitted by data submitters and approved by the State.
- c. Work closely with EOHHS and the existing Data Aggregator Vendor, if applicable, to understand the waiver request process and develop a plan for continued implementation and transition.
- 2) **Transition Implementation**. Implement the Transition Plan.

Task 1B: Project Management and Documentation

- 1) Project Management: Provide expert project management and oversight of all domains and activities throughout the Contract term to ensure deliverables are on time and completed to the highest quality standards. Vendor must utilize proven project management techniques and comply with all relevant standards and best practices for the information technology industry. Vendor shall be responsible for effectively managing any subcontractors, including communicating with subcontractors on behalf of the State.
- 2) **Project Plan:** Develop and deliver a comprehensive Project Plan for implementing and managing the various activities outlined in Domains Two, Three, and Four by the dates specified in *Exhibit A: Data Submission and Collection Schedule* and *Exhibit B: Milestones Schedule*. If bidder is able to process and/or map data quicker than deadlines outlined in this RFP, the bidder should propose the more aggressive timeframe in their proposal response. Deliverables that are late, not delivered, or deemed unacceptable by the ISW are subject to Service Level Requirements (SLR) credits as outlined in *Exhibit C: Service Level Requirements*. The Project Plan will be subject to ISW review and approval, and vendor shall make changes based on ISW feedback. The Project Plan must also be updated annually. At a minimum, the plan must include detailed descriptions of:
 - a. Method and implementation strategy for developing and maintaining a secure opt-out website, including a plan for addressing technical questions regarding the opt-out process;
 - b. Process by which data submitters will register and securely exchange enrollment files with the Lockbox Services Vendor in accordance with the layouts and specifications provided in the TSM. This includes files to be sent by data submitters to the Lockbox Services Vendor and files to be sent back to the submitters from the Lockbox Services Vendor.
 - c. Method and implementation strategy for providing a web-based portal with a secure and encrypted upload interface for data submitters to transmit data to the RI APCD. Web portal must be capable of providing feedback on data quality and volume trending back to submitters:
 - d. A protocol for testing and verifying the performance of the data intake process (with both the Lockbox Services subcontractor and the RI APCD prime data vendor) prior to the first submission of data;

- e. A protocol to implement and maintain encryption methods in accordance with HIPAA, the HITECH Act, and HHS guidance, including:
 - i. Methods that allow data submitters to encrypt transmitted files;
 - ii. Methods that allow data files to be encrypted for storage, backup, and transfer;
 - iii. Methods that allow encryption of data in motion and at rest, including:
 - 1. Encryption of data during transmission using FIPS 140-2 compliant cryptographic controls in accordance with NIST Special Publication 800-52.
 - 2. Encryption of data at rest in accordance with NIST Special Publication 800-111.
 - iv. A process by which data submitters can get technical assistance to resolve encryption issues;
 - v. A process for periodically assessing and, in consultation with the ISW, updating encryption methods to ensure that they meet the highest industry standards.
- f. Method for storing Medicare files received from CMS, including how this data will be incorporated into the fully-processed data extract sent to the State Data Center;
- g. Method for excluding and storing enrollment and claims data for individuals with an optout status of "U" from the data transmitted to the State Data Center. This method must include the ability to integrate "U" members' data back into the fully processed RI APCD extract in the event that the individual's opt-out status is toggled back to an "I";
- h. Method and implementation strategy for mapping the fully-processed RI APCD within the State Data Center environment to a state-licensed business intelligence tool, including a protocol for providing technical assistance to state staff;
- i. Method for ensuring that RI APCD data has been mapped accurately to the business intelligence tool;
- j. Method for refreshing the data available through the business intelligence tool with each quarterly refresh of the RI APCD data within the State Data Center environment, including a protocol for checking that the update is performed correctly and that all existing reports maintain accuracy and functionality;
- k. Proposed strategy for data back-up, disaster recovery (including system failure response/ recovery times), and secure data disposal;
- 1. Designation of a single individual to serve as the Privacy and Security Officer, accountable for the implementation of all privacy measures, for auditing security and encryption processes, and for ensuring that HIPAA is followed at all times;
- m. Designation of a single individual to serve as the Project Manager and single point of contact for all Domains and activities;
- n. Designation of a single individual to serve as the primary point of contact for data submitters, with appropriate back up and support resources. This individual (or their designee) must provide electronic and telephone support to data submitters between the hours of 9am and 5pm ET, Monday through Friday, for the entire contract term;
- o. Weekly project meetings with the RI APCD Project Management Vendor to provide project updates, highlight new issues and risks, and ensure ongoing communication;
- p. Description of how the prime vendor will manage any subcontractor(s), including process for communicating with the subcontractor(s) on behalf of the ISW and escalation procedures for handling any issues with the subcontractor(s);
- q. Description of how the vendor's internal processes will support meeting project deadlines, producing high quality deliverables, and ensuring the project stays on track.
- 3) **Business Rules Document:** Develop and deliver a comprehensive Business Rules Document by the date specified in *Exhibit B: Milestones Schedule*. This document will be updated annually.

Where applicable, vendor must include comparisons of existing methodologies (as performed by existing RI APCD data vendors) with the new proposed methodologies. Unless otherwise noted, all methodologies proposed must be transparent/ "open-source"/cannot be withheld due to proprietary restrictions. The Business Rules Document must include detailed explanations of the following:

- a. Process that will be used by the Lockbox Services Vendor to establish a Master Patient Index (MPI). This involves creating Unique Member IDs (UMID) across all data submitters, to allow the linking of claims to enrollment files and the aggregation of patient claims longitudinally;
- Process that will be used to create a Master Provider Index. This involves creating unique
 healthcare provider and healthcare facility identifiers that will enable accurate member and
 claims record links to unduplicated healthcare organizations and practitioners across
 payers;
- c. Methodology proposed for implementing the following value-added components:
 - Identify claims that may be adjudicated multiple times (claims versioning) and ensure that the fully-processed data reflects the most current adjudication for each claim, based on data submitters' specific processes for identifying versions of each claim.
 - ii. Create distinct episodes of care by identifying inpatient and outpatient visits that are related to the same episode;
 - iii. Classify potentially avoidable utilization, including Emergency Department visits and inpatient admissions;
 - iv. Classify outpatient and other office visits by procedure type using the Berenson-Eggers Type of Service (BETOS) system;
 - v. Identify Coordination of Benefit (COB) claims and combine these with claims from the primary payer in order to reflect a "total paid" category;
 - vi. Attribute patients to primary care providers using at least two different methodologies as directed by the State;
 - vii. Generate flags in the data that allow expedited analysis (e.g. readmissions, emergency room visits, mental health claims, substance abuse claims, etc.);
 - viii. Calculate approximately twenty (20) claims-based quality measures from the State's Aligned Measures Sets (see Appendix 2 for list of measures). The Aligned Measures Sets will be updated annually.
- d. Methodology proposed for implementing the following proprietary value-added components:
 - i. Measure the population's burden of illness using 3M's Clinical Risk Grouping (CRG) software;
 - ii. Classify outpatient claims by the amount and type of resources used in an ambulatory visit using 3M's Enhanced Ambulatory Patient Groups (EAPGs);
 - iii. Classify inpatient claims by the types of resources consumed using 3M's All Patients Refined Diagnosis Related Groups (APR-DRGs);
- e. A protocol for maintaining eligibility records for all covered members and maintaining eligibility spans for those members as eligibility updates are received on a monthly basis from data submitters;
- f. Data model that will be used for mapping the RI APCD extracts from the State Data Center to the business intelligence tools, including a visual schematic.
- 4) **Data Quality Plan:** Develop and deliver a comprehensive Data Quality Plan that outlines the process of ensuring maximum data completeness and accuracy by the date specified in *Exhibit B:*

Milestones Schedule. Vendor must be able to make changes based on ISW feedback. At a minimum, the Data Quality Plan must include methodologies for:

- a. Development of a quality assurance process for the MPI, which includes the ability to monitor:
 - i. The generation of new UMID's for a member who is not found within the MPI;
 - ii. The accurate assignment of UMID's for members found in the MPI;
 - iii. The merging of UMID's for members identified as being reported in duplicate;
 - iv. The splitting of UMID's for members identified as incorrectly grouped under a single UMID;
 - v. The assignment of the same UMID to the same person if they have multiple simultaneous coverages or a break in service with the same or different data submitter.
- b. Tier 1 Validation Checks: Automated data intake validation scripts (for identifying common data mistakes) to be run against the data as part of the extract, transform, and load (ETL) process. Tier 1 Validation checks must be performed and sent back to data submitters within five (5) business days of receiving any data files;
- c. Tier 2 Validation Checks: Quarterly, automated production-level checks for reasonableness of submitted data, including month-over-month trend analyses to validate consistency in data volume and quality. Tier 2 Validation Checks will be reviewed and approved by the ISW annually. Tier 2 Validation checks must be performed, summarized (including the identification of any required corrective action), and sent back to data submitters within ten (10) business days of receiving all quarterly files from submitters;
- d. Plan to produce quarterly post-data load quality reports to the state, which include:
 - i. Demographics (e.g. member counts, percent male, etc.);
 - ii. Rolling aggregation figures (e.g. dollar amounts for paid services in a given month, units per enrolled member per workday, etc.);
 - iii. Count of medical member months compared to pharmacy member months for each submitter
 - iv. Exchange-related enrollment figures (e.g. purchased through the exchange, percent catastrophic coverage plans, etc.);
 - v. Number of records dropped out due to each exclusion and/or business rule applied for each submitter and for the full database;
 - vi. Pharmacy (e.g. percent refills, percent generics, etc.);
 - vii. Provider and facility (e.g. inpatient counts, provider type, etc.);
 - viii. Count of members covered under ERISA-eligible plans;
 - ix. Opt-out tallies;
 - x. "Unknown" tallies:
 - xi. Quality of the Master Patient Index; and
 - xii. Quality of the Master Provider Index.
- e. Tier 3 Validation Checks: Annual, post-processing validation reports showing the degree to which fully processed RI APCD data align with the submitters' internal metrics. Tier 3 Validation checks will be reviewed and approved by the ISW annually. Tier 3 Validation Checks must be performed, summarized, and sent back to data submitters within thirty (30) days of annual data being fully processed and enhanced. Vendor shall collaborate with submitters to reconcile core metrics with the submitters' internal metrics, determine reasons for discrepancies, and identify solutions;
- f. Plan to ensure that RI APCD data within the State Data Center is mapped accurately to a state-licensed business intelligence tool initially, and with every quarterly data refresh;

- g. Plan to ensure that data cubes and reports designed by the vendor or state analysts in the business intelligence tool maintain accuracy and functionality after each quarterly data refresh;
- h. Designation of a dedicated data quality analyst responsible for mining the RI APCD data for data quality issues, including identifying, communicating, and resolving all data errors and anomalies; producing quality assurance reports (see *Task 4A(4)*, *p.32*); and performing any additional data quality investigations as directed by the ISW.

Domain Two: Lockbox Services

The prime vendor shall be responsible for subcontracting with a Lockbox Services Vendor.

The Lockbox Services Vendor will be responsible for designing, hosting, updating, and maintaining a secure opt-out website through which individuals can designate their opt-out choice. The existing vendor will continue to host the opt-out website through December 31, 2016. From the contract start date through the deadlines outlined in *Exhibit B: Milestones Schedule*, the Lockbox Services Vendor will obtain all existing documentation, undertake planning and design efforts, and test all functionality. The new opt-out website will have the same URL as the current one (https://www.riapcd-optout.com).

The Lockbox Services Vendor will also be responsible for receiving monthly or quarterly enrollment files from all RI APCD data submitters, using these files to develop and maintain a Master Patient Index, flagging opt-out statuses, and transmitting monthly or quarterly response files - containing members' opt-out status and Unique Member ID - back to RI APCD data submitters.

Description of Domain Two Tasks

Task 2A: Opt-Out Portal Hosting and Operations

- 1) **Hosting:** Provide all necessary infrastructure to host the opt-out website ("portal"), including but not limited to, the facility, hardware, rack space, power, and internet connection. As part of this requirement, vendor shall manage and monitor the environment to ensure the opt-out portal structure is secure, functioning, and stable (see *Exhibit C: Service Level Requirements*)
- 2) **Splash Page** (**if applicable**): Upon receiving all current documents (see *Task 1A(1)(a)*, *p.16*), deploy a "splash page" advising website visitors of the launch date of the new opt-out website. Users who visit the splash page shall be allowed to enter their email address to be notified when the website goes live, so that they can visit the website at that time. The vendor shall keep a record of these emails to send a reminder when the full portal becomes available, inviting all users who supplied their email address to return to the portal and opt-out of the RI APCD if they still wish to do so. The "splash page" shall also provide a state email address that members may contact with questions about the opt-out process.
- 3) **Opt-Out Portal Design:** Design a fully functioning opt-out portal for the administration and collection of information regarding members who designate their wish to opt-out of or opt back into the RI APCD. Vendor can choose to redesign the portal interface or keep the design as is. Opt-out portal design will be subject to ISW approval. The opt-out portal shall have the following functionality:
 - a. Member will be required to enter their name, DOB, subscriber number, and other required demographic information along with selection to opt-out or opt into the RI APCD;
 - b. The member will be given a tracking number to follow up on the status of their request;
 - c. The member's information will be run against existing records in the MPI;
 - d. If the member's information matches that of an existing record in the MPI, then the optout indicator will be updated for all matched instances of that person;
 - e. A member who returns to the system with a tracking number will be informed if a match has been found and whether their opt-out decision has been registered;

- f. If no match is found in the MPI, the member's information will be kept on file for matches in the future.
- 4) **Testing:** Complete testing and confirm stable operations for opt-out website launch. As part of this requirement, vendor shall deliver test summary results for the ISW's review.
- 5) **Opt-Out Portal Launch:** Launch the opt-out website.
- 6) **Maintenance and Updates:** Maintain and update the functionality, stability, and operations of the secure opt-out website for the entire contract term. As part of this requirement, vendor shall conduct application security testing and periodic functionality testing (see *Exhibit C: Service Level Requirements*). Vendor shall respond to any technical questions received from end users or the ISW regarding the functionality and operations of the portal.

Task 2B: Master Patient Index

- 1) **Master Patient Index (MPI):** Implement the process to migrate and maintain continuity with the existing, historical MPIs. As part of this task, vendor shall:
 - a. Implement a process by which RI APCD data submitters can register and transmit monthly or quarterly enrollment files, based on approved plan in $Task\ 1B(2)(b)$, p.17.
 - b. Receive and process monthly or quarterly enrollment files from all RI APCD data submitters, based on approved plan from $Task\ 1B(3)(a)$, p.19. As part of this task, vendor shall:
 - i. Load full member information into the MPI:
 - ii. Perform data matches across all RI APCD submitters' member information;
 - iii. Assign cross-payer UMIDs to all member records;
 - iv. Maintain all UMIDs for individuals over time;
 - v. Assign an opt-out status flag to members according to the following protocol:
 - a. Flag any new or existing members who opt-out with an "O";
 - b. Flag any new members who have not opted-out, or existing members who have opted back in, with an "I";
 - c. For new data submitters submitting their historic files for the first time members who are not currently enrolled with any other RI APCD data submitter should be flagged as "U", since data submitters do not notify "historical" members of their right to opt out.8
 - d. Compare list of current members from all data submitters (all of whom have been notified of opt-out) against members with an opt-out status of "U". If any "U" members appear in current member eligibility files, toggle the member's flag to "I" or "O" based on their current opt-out status and indicate the month the opt-out status was updated.
 - vi. Send response files back to RI APCD data submitters, incorporating the UMID and opt-out status flag, using the layout published in the TSM and within the deadlines specified in the TSM;⁹
 - vii. Provide feedback to RI APCD data submitters about all failed submissions within five (5) business days of receipt.

⁸ See RFP Section 2, "Background" for more information about "U" - Unknown opt-out status.

⁹ Response files are due to submitters within 10 business days of submission (for monthly or quarterly production data).

- c. Implement a MPI quality assurance process. As part of this task, vendor shall:
 - i. Perform quality assurance on all received data (e.g. consistent field formatting, logical field values, and valid field values);
 - ii. Perform MPI and UMID quality assurance, based on approved plan from Task 1B(4)(a), p.20;
 - iii. Cross-check members identified as opt-outs by the website against their identification within the MPI database to verify accurate flagging;
 - iv. Report summary results to the ISW on a quarterly basis, including the total number of UMIDs in the MPI, total number of opt-out requests, the number of members who opted-out using the portal but for whom no matches were found in the MPI, total number of members with "U" opt-out status, number of redundant opt-out requests, and the number opted-out UMIDs by each data submitters' feed;
 - v. Perform annual requirements analysis for the UMID assignment process.
- d. Onboard new submission feeds (i.e. those not already submitting data as of the contract start date). As part of this task, vendor shall:
 - i. Receive and process a test file (one month of data), providing feedback and guidance regarding needed corrections, within the deadlines specified in the TSM;
 - ii. Receive and process a one-time historical enrollment file (three years of data), within the deadlines specified in the TSM.
- 2) Project Management and Technical Support: Collaborate with project staff and data submitters to develop and implement a procedure for project-related communications and technical assistance. As part of this requirement, vendor shall:
 - a. Attend all data submitter workgroup meetings to answer any questions and provide technical support as needed;
 - b. Establish customer service channels for RI APCD data submitters;
 - c. Provide access to technical experts to resolve data exchange issues.

In addition to the activities outlined under Tasks 2A and 2B, the vendor should be capable of receiving files from entities other than RI APCD data submitters, and mapping them to the MPI as needed for research requests. The format of these data sets will be determined in collaboration with the data submitter and EOHHS. Specifically, vendor should be capable of:

- a. Intaking patient identifiable, non-claims data, files from organizations other than RI APCD data submitters (e.g. research entities);
- b. Matching patient identifiers to the MPI;
- c. Sending requested population's UMIDs to the RI APCD data management vendor. The data management vendor will then send de-identified claims and enrollment data to the requesting organization.

Any and all such intake and processing of additional files will be facilitated by Domain 5: Special Projects/Enhancements of this RFP.

Domain Three: Data Management

EOHHS seeks to obtain the services of a vendor, who has the capacity and expertise to collect, clean, organize, enhance, and validate the RI APCD data. If applicable, the vendor shall also be responsible for migrating the data collection process to their proposed platform, with minimal disruption to data submitters.¹⁰

The vendor shall securely transmit the fully-processed RI APCD data, on a quarterly basis, to the State Data Center. In addition, the vendor shall provide supplementary data sets and ad-hoc analytic services in support of the data release process and other State initiatives.

Description of Domain Three Tasks

Task 3A: Data Collection and Aggregation

Vendor shall:

1) **Data Submission Portal:** Develop and maintain a secure online portal for protected submission, transmission, and encryption of all submitted RI APCD data. Implementation of the portal should be based on the approved plan outlined in $Task\ 1B(2)(c)$, p.17.

- a. Prior to receiving the first monthly data submission directly from submitters, test and verify the data intake process based on the protocol developed in $Task\ 1B(2)(d)$, p.17.
- 2) **Monthly or Quarterly ETL:** Either monthly or quarterly (depending on the preference of the data submitter), execute an ETL process that supports a minimum of 20 data submission feeds, each with multiple data file types (e.g. eligibility, claims, provider).¹¹
 - a. Onboarding of new submission feeds (i.e. those not already submitting data as of the contract start date) shall include mapping payer fields to established RI APCD data sets, processing test data sets, producing a report based on the processed test data sets, working with the data submitter to make the appropriate adjustments to their data extract or drafting the appropriate waiver, and receiving and processing submitter's historic (past three years) data.
 - b. Vendor must be able to make updates to the ETL process to accommodate annual changes to the TSM.
- 3) **Medicare Custodian:** Serve as the CMS-approved Medicare Custodian for data sets obtained through the CMS State Agency Request Programs. As part of this requirement, vendor shall:
 - a. Meet the CMS requirements to serve as the Custodian of Medicare files containing protected health information (PHI) (refer to Appendix 3 for the CMS Data Use Agreement. The vendor will be required to comply with these terms.);
 - b. Support EOHHS in their requests for newly available Medicare data via the CMS State Agency Request Program;
 - c. Transform the Medicare data files received from CMS into the format specified in the TSM or as needed to integrate with the RI APCD, as permitted under the CMS Data Use Agreement. This includes:

¹⁰ The existing Data Aggregator Vendor will continue to intake files directly from data submitters through the submission of September 2016 data (currently due by November 30, 2016). See Exhibit A: Data Submission and Collection Schedule.

¹¹ A single payer may have multiple data submission feeds (i.e. behavioral health, DME, student, etc.). It is expected that by

January 2017 there will be 18 separate submission feeds representing 11 payers.

- i. Creating an enrollment file for Medicare beneficiaries and transmitting it to the Lockbox Services Vendor on a quarterly basis for matching against the MPI; and
- ii. On a quarterly basis processing the response file received back from the Lockbox Services Vendor by registering Medicare beneficiaries' opt-out requests.
- 4) **Data Collection Management:** Manage and update the data collection process on an ongoing basis, adhering to the timeline laid out in *Exhibit A: Data Submission and Collection Schedule*. As part of this requirement, vendor shall:
 - a. Administer all rules, policies, and procedures for the collection of data, as established by the Regulations and in accordance with the most recent TSM;
 - b. Execute a plan that ensures all data submitters submit the requisite conforming data as laid out in the TSM, including any waivers that may be proposed by the data submitter and approved by the state, based on approved recommendations from *Task 1B(2)*, *p.17*;
 - c. Notify data submitters reasonably prior to any waivers expiring, prompting them to begin submitting the data or renew their waiver application;
 - d. Review the TSM independently, with the state, and with data submitters on an annual basis. Provide specific recommendations on what gaps may exist and what changes need to be made. All recommendations will be subject to the ISW's approval;
 - e. Provide data submitters with a complete list of all Tier 1 and 2 Validation Checks that will be run against their data. This list should include all data validation and "reasonableness" checks beyond just the TSM element thresholds (e.g. non-United States/Canadian addresses, dates that are in the future, etc.);
 - f. Maintain documentation of data submissions, including requests for, responses to, and resubmissions. Vendor shall make such documentation available to the ISW upon request;
 - g. Maintain documentation of waivers, including requests for, responses to, and expiration dates. Vendor shall make such documentation available to the ISW upon request;
 - h. Re-evaluate data collection and aggregation processes on an annual basis and propose improvements to the ISW.
- 5) **Tier 1 Pre-Load Quality Assurance and Validation:** Perform automated quality assurance, validation, and edit checks on all submitted data as part of the ETL process. As part of this task, vendor shall:
 - a. Implement Tier 1 Validation Checks and submitter audit reports based on approved plan from $Task\ 1B(4)(b)$, p.20 within five (5) business days of receiving each file;
 - b. Identify data submissions that require correction and request resubmission;
 - c. Track resubmission timelines to ensure data submitters resubmit requested data within thirty (30) business days of notification to resubmit;
 - d. Receive and process corrected and resubmitted data sets from previous periods, replacing or deleting records as needed.
- 6) **Tier 2 Production-Level Quality Assurance and Validation:** Perform ongoing production-level quality assurance, validation and edit checks. As part of this task, vendor shall:
 - e. Implement Tier 2 Validation Checks and submitter audit reports based on approved plan from $Task\ 1B(4)(c)$, p.20 within ten (10) business days of receiving all quarterly files;
 - f. Collaborate with data submitters to resolve identified discrepancies and determine when resubmission is required:
 - g. Track resubmission timelines to ensure data submitters resubmit requested data within thirty (30) business days of notification to resubmit;
 - h. Receive and process corrected and resubmitted data sets from previous periods, replacing or deleting records as needed.

- 7) **Data Submitter Engagement:** Collaborate with data submitters to develop and implement a procedure for project-related communications and technical assistance. As part of this requirement, vendor shall participate in quarterly data submitter calls, facilitated by the RI APCD Project Management Vendor. Participation shall consist of providing relevant updates to data submitters, answering any technical questions, and sending follow-up correspondences, as needed.
- 8) **Data Collection Status Reports:** Provide the State with monthly status reports on each data submitter. Vendor shall, in consultation with the State, notify data submitters who are non-compliant with data submission rules, as outlined in the Regulations and the TSM.

In addition to the activities outlined in Task 3A, the vendor's proposed system should be capable of incorporating other non-claims extracts as requested by the ISW. This may include receiving research extracts for specific UMIDs containing custom fields and linking these to RI APCD data to be sent back to the researcher in a custom extract, or receiving clinical data extracts and adding them to the dataset. These activities will be facilitated by Domain 5: Special Projects/Enhancements of this RFP.

Task 3B: Data Infrastructure and Enhancement

- 1) **Data Infrastructure:** Provide the infrastructure for the secure collection, aggregation, and enhancement of RI APCD data. As part of this requirement, vendor shall:
 - a. Re-process the historic data (using the raw unprocessed data as it was received from data submitters) based on the vendor's new approved business rules (see *Task 1B(3), p.18*);
 - b. Provide a secure environment for RI APCD data that is separate from other activities and projects, including segregated storage for Medicare data;
 - c. Implement a process to securely backup the RI APCD data, hold it in a remote location, and verify that the data is backed-up properly;
 - d. Implement an appropriate disaster recovery plan and test the disaster recovery plan, based on the approved plan from $Task\ 1B(2)(k)$, p.18;
 - e. Develop and implement a process for securely disposing of defective or end-of-life hardware or media that contains RI APCD data, based on the approved plan from *Task* 1B(2)(k), p.18;
 - f. Provide all software and hardware required to fully support the required functionality described in this RFP, complying with all relevant standards and best practices for the information technology industry.
- 2) Value-Added Components: Employ industry standard tools and methodologies to enhance the RI APCD data by implementing and integrating the value-added components outlined in Task 1B(3)(c) and 1B(3)(d), p.19.
- 3) **Master Provider Index:** Develop, test, and refine a Master Provider Index by implementing unique healthcare provider and healthcare facility identifiers, based on the approved plan from *Task 1B*(3)(b), p.19.
- 4) **Tier 3 Post-Load Validation with Data Submitters:** Conduct post-load annual validation with data submitters. As part of this task, vendor shall:
 - a. Collaborate with the ISW to develop post-load validation metrics for submitters, such as number of Emergency Department visits and Inpatient visits;

- b. Generate annual data submitter validation reports based on approved plan from *Task* 1B(4)(e), p.20 within thirty (30) business days of completing data processing and enhancement. Metrics included in reports must be generated using the fully processed and enhanced RI APCD data. Vendor shall provide definitions and methodologies for each metric in the report;
- c. Assist the ISW in addressing identified discrepancies by providing technical assistance through insights into the effects of data transformation processes;
- d. Provide recommendations to the ISW on whether data submitters should resubmit files. Vendor shall collect and process resubmissions as needed.

In addition to the activities in Task 3B, the vendor should have the ability to apply other proprietary grouper software to the fully processed RI APCD data, in addition to implementing the value-added components outlined in $Tasks\ 1B(3)(c)$ and 1B(3)(d), p.19. Additional proprietary grouper software may include:

- 1) Classifying inpatient claims by the types of resources consumed using the open-source All Patient Diagnosis Related Groups (AP DRGs); and
- 2) Classifying potentially avoidable utilization using 3M's Potentially Preventable Events (PPE) software.

The decision to implement any of these additional groupers will be made by EOHHS in consultation with the vendor, and will be facilitated by Domain 5: Special Projects/Enhancements of this RFP.

Task 3C: Data Extracts and Analytic Support

Vendor shall:

- 1) **Quarterly Full RI APCD Data Extract:** Transmit the fully processed and enhanced RI APCD data extract to the RI State Data Center on a quarterly basis, based on the approved plan from *Task 1B(2)*, *p.17*. This data extract shall exclude data for individuals who have elected to opt-out of the database or have an opt-out status of "U", and shall contain the most recent version of all RI APCD data, all value-added components, and the Master Provider Index.
 - a. Develop and maintain a Data Dictionary which includes a full description of each element in the RI APCD data extract and how it was derived. An updated Data Dictionary must accompany all data extracts to the RI State Data Center.
- 2) **Annual "Level 3" Data Sets:** Produce and transmit Level 3 data sets to the RI State Data Center, to be used in support of the data release process (see "*Data Release*" in *Section 3: Background* of this RFP). Each year the vendor shall deliver ten data sets; five data sets for the current year and a refresh of the five data sets from the previous year. The five data sets required for each year, are as follows:

	Files	Level of Detail
1	Medical claims + Associated Eligibility + Associated Provider	Service Year & Month, 3-digit zip code
2	Pharmacy claims + Associated Eligibility + Associated Provider	Service Year & Month, 3-digit zip code
3	Medical claims + Associated Eligibility + Associated Provider	Service Date, 5-digit zip code
4	Pharmacy claims + Associated Eligibility + Associated Provider	Service Date, 5-digit zip code
5	Associated value-added groupers for Medical claims	Value added file

The specifications for the elements to be included in each Level 3 data set can be found in Appendix 4.

- 3) **Common Provider Database (CPDB)**: Collaborate with the Rhode Island Quality Institute (RIQI)'s Common Provider Database Project. ¹² As part of this task, vendor shall:
 - a. Upon the ISW's direction, send a copy of the RI APCD Master Provider Index to RIQI;
 - b. Integrate CPDB provider data into the fully-processed extract sent forth to the State Data Center on a quarterly basis. The CPDB extract will include data elements not otherwise collected by the RI APCD linked by a common key (e.g. NPI).
- 4) **Technical Support:** Provide technical support to the ISW and other State employees, including employees of the State Data Center, related to the role of RI APCD data vendor. Questions typical for this role include the status of submissions; the completeness, validity and quality of received and processed data; how the data is processed and enhanced; and general questions related to the contents of the RI APCD data.
- 5) **Ad-Hoc Analytic Support:** Provide ad-hoc analytic support by using the RI APCD data to answer questions relating to policy analysis, program management, population health, and the quality, cost or utilization of healthcare services in Rhode Island. For purposes of this RFP, ad-hoc analytic support will not exceed 15 hours/month.
- 6) Analytic Support for the RI Care Transformation Collaborative (CTC): The CTC is Rhode Island's Patient-Centered Medical Home initiative, and includes approximately 375 healthcare providers who are grouped into approximately 50 practice sites and three analytic cohorts. Combined, these providers deliver care to over 300,000 Rhode Islanders. As part of this task, the vendor will provide analytic support services for the RI CTC. This includes, calculating the risk-adjusted utilization and PMPM spend statistics for:
 - a. CTC as a whole;
 - b. each CTC practice site;
 - c. each CTC analytic cohort; and
 - d. a non-CTC comparison group which includes all other RI APCD data.

Using a specific patient-to-provider attribution methodology provided by the CTC, the vendor will determine which RI APCD members can be assigned to a CTC provider (see Appendix 5 for attribution and measures methodologies). The vendor will then use a provided lookup table to group healthcare providers (by their National Provider ID) to each CTC practice site and analytic cohort, in order to calculate the required utilization statistics and PMPM. Required utilization statistics include the rate of all-cause hospital admissions, emergency department visits, preventable emergency department visits, hospital admissions for ambulatory care sensitive conditions, and 30-day readmissions. The vendor shall perform these analytic support functions on a quarterly basis. The final data report to the CTC shall coincide with the delivery of each

Information System (MMIS), the National Plan and Provider Enumeration System (NPPES), State licensure data, medical malpractice data, and others. In this way, the CPDB will include more information than any of these single sources would be able to capture on their own (e.g. provider education, whether the provider is accepting new patients, and importantly, the relationship between individual providers, provider organizations, and health plans). The CPDB data will then be shared with various state agencies and stakeholder groups. The CPDB is scheduled to launch in late 2016 and will be managed and operated by the Rhode Island Quality Institute (RIQI), a non-profit group aimed at improving the healthcare system in the state by building on the availability and advantages of health

information technology.

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¹² The Common Provider Database (CPDB) Project is a statewide initiative to provide a single, comprehensive source of data about healthcare providers serving Rhode Island residents. To accomplish this, the CPDB will integrate provider data from several data sources, including: RI APCD, HSRI, the Medicaid Management Information System (MMIS), the National Plan and Provider EUL (NPPES), State licensure database (CPDR).

quarterly full RI APCD data extract (see *Exhibit A: Data Submission and Collection Schedule*). The vendor shall participate in any meetings with the CTC to provide technical support and explain methodologies applied, as requested by the ISW.

In addition to the activities in Task 3C, the vendor should be able to produce and transmit data sets on an ad-hoc basis to State agencies and external vendors as directed by the ISW. Specifications for these data sets will be determined by EOHHS, and will be dependent on the data elements requested as well as the requestor. Any and all such ad-hoc data requests will be facilitated by Domain 5: Special Projects/Enhancements of this RFP.

Domain Four: Business Intelligence Tool and Technical Support

The vendor shall be responsible for linking the fully-processed RI APCD data (which will be hosted and stored within the State Data Center) to a state-licensed business intelligence tool, Cognos Analytics or Tableau, allowing state users to easily connect to the data and then visualize it through interactive and sharable reports and dashboards.

As part of their proposal response, bidders should propose which tool – Cognos Analytics or Tableau – they recommend mapping the RI APCD data to. EOHHS will consider the bidder's recommendation, but may choose to have the vendor map the RI APCD to the other tool instead. Therefore, bidders should describe their capability to map the RI APCD data to both Cognos Analytics and Tableau. The vendor should be *capable* of linking the fully-processed RI APCD data to both business intelligence tools, but will only be linking one tool under Domain 4.

In addition to mapping the RI APCD data to the business intelligence tool, the vendor will be responsible for updating the tool with each new quarterly extract loaded to the State Data Center, implementing quality assurance checks, and providing ongoing maintenance and technical support for the tool as needed.

Description of Domain Four Tasks

Task 4A: BI Tool Mapping

- 1) **Visioning and Design:** Facilitate workgroup meetings with the ISW and other State employees to design the RI APCD interface and layout in the agreed upon business intelligence tool. As part of this requirement, vendor shall:
 - a. Conduct visioning sessions to develop a shared understanding of the software's intended uses, functionality and audience;
 - b. Facilitate meetings to gather information and feedback on functionality, design preferences and display options in order to increase the value of the information available via the business intelligence tool;
 - c. Leverage the vendor's own subject matter expertise in the following areas:
 - i. Useable and accessible design;
 - ii. Presentation of complex materials in simple formats;
 - iii. Analytic utility for end users.
- 2) **Data Model Development**: Design and implement a data model that optimizes the RI APCD data to enforce referential integrity and enhance efficiency and usability. The requirements for this data model are as follows:
 - a. Reads from the fully-processed RI APCD data within the State Data Center environment (without altering the data held within the State Data Center);
 - b. Captures all RI APCD data elements from the last five years (based on date of service);
 - c. Reflects feedback and recommendations from visioning sessions in *Task 4A(1)*, p.31;
 - d. Accessible to State analysts through SQL, SAS, and other statistical software;
 - e. Supports and is accessible by the agreed upon business intelligence tool;
 - f. Provide the ISW with the necessary documentation to understand the data model, including: the relationship between data tables (e.g. key fields linking tables); examples of how certain tables and fields may/may not be linked for various analyses; and, a visual schematic of the data model. This documentation shall be kept up-to-date based upon

State feedback. For example, if a state analyst asks a question and the vendor answers with further clarification on a field, this should be updated in the documentation. Vendor shall keep a log of changes in a single location made available to the State.

- 3) **Mapping to Business Intelligence Tool:** Map the RI APCD (within the State Data Center environment) to either Cognos Analytics or Tableau using the modeled data from *Task 4A(2)*, *p.31*. The State will provide the software license to be used for this task. The requirements for the business intelligence tool are as follows:
 - a. Accessible to all approved State users via any modern browser;
 - b. Protect access to RI APCD data using role-based permissions;
 - c. Refresh all reporting content quarterly, including existing reports and dashboards, using the updated RI APCD data available in the State Data Center;
 - d. Allow queries of all data elements available in the State Data Center;
 - e. Provide access to the last five years of RI APCD data (based on date of service);
 - f. Develop and update an easy-to-understand description of data sets and dashboards (such as a User's Guide, FAQs, etc.)
- 4) **Quality Assurance and Maintenance**: Conduct quality assurance checks to ensure RI APCD data is mapped properly to the business intelligence tool initially, and after each quarterly refresh, as outlined in *Task 1B*(4), *p.19*. As part of this task, vendor shall:
 - a. Test initial mapping and functionality of the business intelligence tool in advance of making the data available to the State;
 - b. Perform checks to ensure data continues to map properly after content is refreshed with each quarterly update of the RI APCD data;
 - c. Produce a quarterly quality assurance report(s) to be delivered to the ISW within thirty (30) days of initial mapping, and within ten (10) days of each quarterly refresh of the business intelligence tool. The quality assurance report shall include, but not be limited to, data tables containing all metrics designated in Appendix 6, as well as a breakdown of number of records excluded due to the application of business rules;
 - d. Test functionality of existing cubes and reports (developed by the vendor and/or state analysts), to ensure reports maintain accuracy and functionality after each quarterly refresh of the business intelligence tool;
 - e. Provide test results to the ISW as requested;
 - f. Conduct periodic maintenance and updates needed to maintain the tool's functionality.

In addition to the activities in Task 4A, the vendor should be capable of designing and developing pre-built "presentation" reports as requested by the ISW. These reports may include graphic and other visual displays of data on key healthcare issues that may be used to present to State agency leadership, policymakers, and/or used by state analysts. If the state determines a need to utilize these skills, any and all such "presentation" reports will be facilitated by Domain 5: Special Projects/Enhancements of this RFP.

Task 4B: Technical Support

- 1) **Technical Support for BI Tool:** Provide ongoing technical support for the business intelligence tool in a timely manner.
 - a. Work closely with the State Data Center staff to optimize the way in which RI APCD data is loaded and stored in order to promote efficient and correct mapping of data to the business intelligence tool;

- b. Provide training for state analysts, including an overview of claims data and the RI APCD, key data concepts to understand how to analyze claims data using the tool, and functionality and navigation of the business intelligence tool;
- c. Work with the State to develop a ticketing system for reporting, tracking and responding to state analysts' questions and issues pertaining to the business intelligence tool in a timely and efficient manner.

Domain Five: Special Projects/Enhancements

In addition to Domains one through four, should additional funding become available, the State reserves the option to direct the vendor to conduct additional tasks to support the overall scope of this project. It is critical that the state have the flexibility to bring on additional technical assistance and expertise in a timely manner in order to perform additional APCD activities to those in *Section 4: Scope of Work*, Domains one through four of this RFP.

The decision to utilize services under Domain five will be solely at the State's request, and will be for specific enhancement activities not already included under Domains one through four. There is no commitment on the part of the State to utilize any or all special projects/enhancement activities.

These optional Domain five activities will be defined and agreed to in writing, by both the State and the vendor, before any enhancement work begins. If such work is requested, vendors will be expected to use the hourly rates established in the award, to price out the work. Altogether, Domain five work cannot exceed 10% of the initial award. Should new funding become available, the Purchasing Agent would need to authorize payments in excess of 10% of the contract for special enhancements.

The awarded vendor shall not perform any special enhancement activities without receipt of a formal change order issued by the Division of Purchases.

SECTION 5: TECHNICAL PROPOSAL

Narrative and Format

Technical Proposals must conform to the following submission format:

- Provided bound or unbound (no binders) with each section separately tabbed;
- Paper Size: 8.5 x 11 inches;
- Minimum font size: 11 point (except for footnotes, headers, or footers); and
- Each proposal must identify the vendor name in the page footer.

No pricing or cost information can be included in the Technical Proposal. A detailed description of each Technical Proposal section, and the order in which they must appear, follows:

Table of Contents (Not scored; No page limit)

Bidders must provide a table of contents that corresponds to the Technical Proposal sections.

Executive Summary (Not Scored; Limit 2 Pages)

The Executive Summary should highlight the contents of the Technical Proposal and provide a broad understanding of the bidder's technical approach and ability. The executive summary should include the following:

- A clear and concise summary of the bidder's understanding of the project;
- A clear and concise summary of the proposed approach and how it will be tailored to Rhode Island's needs;
- A description of the overall value that the bidder brings to the RI APCD; highlighting those factors that the bidder believes distinguishes its proposal;
- A general description of the firm's capabilities and role of any subcontractors.

Narrative Response to Required Tasks (30 Points; Limit 10 Pages)

Using the descriptions of the Domains, cross-referenced with *Exhibit A: Data Submission and Collection Schedule, Exhibit B: Milestones Schedule*, this section must include:

- **Proposed Strategy:** The vendor's proposed strategy for accomplishing each task and adhering to the outlined timelines. This description should also detail how the bidder plans to work with subcontractor(s) and the State Data Center to ensure seamless collaboration, and include a clear identification of any exceptions, enhancements, or alternatives to the required tasks outlined in the Scope of Work. This section must include:
 - A description of the methodologies the vendor will use to provide the required lockbox services, specifically the development of the Master Patient Index.
 - O A description of the methodologies the vendor will use to provide the required, non-proprietary, value-added enhancements $(Task\ 1B(3)(c),\ p.19)$.
 - The vendor's ability to support more than the minimum of 20 concurrent data submission streams;
 - The vendor's strategy for fully-processing the data and sending the data extract to the State Data Center within sixty days of receiving the data from data submitters. Vendors who are unable to commit to this 60-day turnaround must clearly articulate this in their

- narrative response, and must provide the deadline that they would be able to commit to (e.g. 120 day processing/load, etc.).
- The vendor's recommendation for which business intelligence tool (Cognos Analytics or Tableau) the RI APCD data should be mapped to, within the State Data Center;
- The vendor's strategy for ensuring data quality and for improving its consistency and reliability over time;
- O High level descriptions of the vendor's abilities to perform additional special enhancement tasks as described in *Section 4: Scope of Work* of this RFP.
- Work Plan: A work plan indicating the key activities, deliverables, and milestones that will be employed to successfully complete the required tasks, and the vendor's envisioned timeline. This work plan should be depicted in a table or by some other graphical means and must align with the dates outlined in the RFP.

This section will be scored on the following:

- Quality and comprehensiveness of work plan;
- Clear description of data quality strategy;
- Suitability of approach, proposed tools, and methodologies;
- Degree to which the bidder provides a distinguishable value to the state;
- Capability of bidder to customize state business intelligence tools and enhance the state's analytic abilities.

Potential Risk Identification and Mitigation Strategies (5 Points, Limit 1 Page)

Drawing on previous experience with similar projects, bidders must identify critical dependencies and key risk factors associated with their proposal, and a plan for mitigating potential risks to the timeline.

This section will be scored on the following:

• Has the bidder effectively identified potential risks and mitigation strategies?

Relevant Experience and Expertise (15 Points; Limit 5 Pages)

This section must include the following information:

- A description of the bidder's company, including when it was established, number of employees, locations of corporate offices, and with which offices the staff that will be assigned to this project are affiliated. Bidders must also include a high-level description of the firm's organization.
- Using the bulleted list provided in *Section 3: Background, Minimum Requirements*, vendors must demonstrate that they meet the minimum qualifications for this RFP.
- An overview of the bidder's depth and breadth of similar experience, including:
 - o Prior successes:
 - Examples of issues that the vendor has encountered with engagements of similar scope and size, and how these issues were resolved;
 - O Demonstrated experience applying open-source and other groupers as required in this RFP (see $Tasks\ 1B(3)(c)$ and 1B(3)(d), p.19), as well as the additional special enhancements open source groupers outlined in Task 3B; and
 - A description of the bidder's information security and data protection experience, capabilities, and track record (including any data breaches of protected health information or personally identifiable information and vendor's response to same).

- At least three (3) client references for the prime bidder for projects that are of comparable size, complexity and scope (bidders may choose to provide references that correspond to the projects detailed in the bullet above, or may choose other relevant projects). For each reference, the vendor should include the following information:
 - o Name of organization
 - o Supervisor/Contact person's name and contact information
 - o Relevance to this Proposal
 - o Brief Summary of project
 - Timeframe for the project
- At least three (3) client references for each proposed Subcontractor for projects that are of comparable size, complexity and scope (bidders may choose to provide references that correspond to the projects detailed in the bullets above, or may choose other relevant projects). For each reference, the Subcontractor(s) should include the following information:
 - o Name of organization
 - o Supervisor/Contact person's name and contact information
 - o Relevance to this Proposal
 - Brief Summary of project
 - Timeframe for the project
- The relationship with the proposed Subcontractor(s), including whether the bidder has worked with the Subcontractor in the past, and the proposed Subcontractor's qualifications pertaining to this engagement. In this section, bidders must provide a strong justification for choosing each particular Subcontractor, as well as examples of prior collaborations with that Subcontractor.

This section will be scored on the following:

- Do the bidder and subcontractor(s) demonstrate expertise in the requirements in this RFP?
- Do the bidder and subcontractor(s) have a successful record of providing similar services?

Staffing Plan (20 Points; Limit 3 Pages)

A narrative description of the qualifications of staff and subcontractors proposed, including: their proposed roles, their percent effort on the project (%FTE), their physical location (e.g. whether they will be on-site in Rhode Island, at the vendor's U.S office location, overseas, etc.), and whether they are part of the prime vendor or subcontractor(s)'s organization. The proposed project team must include individuals with substantial relevant experience, as well as past experience in vendor-to-vendor collaboration. Additionally, this section must include the following:

- Designation of a Project Manager who will serve as the single point of contact for all Domains and activities:
- Designation of a Privacy and Security Officer;
- Designation of a project staff person dedicated to RI APCD data quality;
- An organizational chart for this project, distinguishing between staff of the prime vendor and subcontractor(s); and
- Resumes for proposed project staff.

This section will be scored on the following:

- How well does the staffing plan, organizational structure, and %FTE support the project requirements?
- Are on-the-ground resources provided?
- Do the individuals assigned to the project have similar experience?

SECTION 6: COST PROPOSAL

The Cost Proposal, including all budget components and the budget narrative, must be separately sealed and clearly marked. Cost Proposals will be evaluated on their relative competitiveness and will only be opened for those bidders deemed responsive during the technical evaluation phase. Bidders shall submit the total cost for Domains one through four, itemized in the manner outlined below.

Budget

- Appendix 7A Cost Proposal Worksheet: Bidders must indicate the proposed cost for each Domain, by task and year. Any non-personnel, "other costs", must be described in the Budget Narrative section. Once completed, the Cost Proposal Worksheet should be copied and pasted into the cost proposal document.
- Appendix 7B Project Staffing Worksheet: Bidders must indicate the amount of time each proposed project team member (including subcontractor staff) anticipates dedicating to each Domain, by task and year. This budget must be based on the effort levels indicated in the Staffing Plan, Section 5 of the Technical Proposal. The Project Staffing Worksheet must be completed *prior to* completing the Cost Proposal Worksheet, as values from the Project Staffing Worksheet will auto-populate the Cost Proposal Worksheet. One completed, the Project Staffing Worksheet should be copied and pasted into the cost proposal document.

Budget Narrative

The Budget Narrative should describe the costs included in the Cost Proposal Worksheet and Project Staffing Worksheet, how each cost was calculated (specifically the costs labeled as "other costs"), and any assumptions made in the cost calculations.

Any additional cost savings which would result from the bidder being awarded the contract outlined in the RFP should also be described in this Budget Narrative section.

The entire cost proposal, including budget and budget narrative sections, is limited to 5 pages.

SECTION 7: EVALUATION AND SELECTION

Proposals will be reviewed by a Technical Review Committee comprised of staff from state agencies. To advance to the Cost Evaluation phase, the Technical Proposal must receive a minimum of 60 (85.7%) out of a maximum of 70 technical points. Any technical proposals scoring less than 60 points will not have the cost component opened and evaluated. The proposal will be dropped from further consideration. Proposals scoring 60 technical points or higher will be evaluated for cost and assigned up to a maximum of 30 points in cost category, bringing the potential maximum score to 100 points.

The Executive Office of Health and Human Services reserves the exclusive right to select the individual(s) or firm (vendor) that it deems to be in its best interest to accomplish the project as specified herein; and conversely, reserves the right not to fund any proposal(s).

Proposals will be reviewed and scored based upon the following criteria:

Proposal Section	Proposal Section	Possible Points
	Narrative Response to Required Tasks	30 pts
Technical Proposal	Relevant Experience and Expertise	15 pts
	Potential Risks/Mitigation Strategies	5 pts
	Staffing Plan	20 pts
	Total Possible Technical Points	70 points
Cost Proposal		30 points
	Total Possible Points	100 points

^{*}The Low bidder will receive one hundred percent (100%) of the available points for cost. All other bidders will be awarded cost points based upon the following formula:

(low bid / vendor's bid) * available points

For example: If the low bidder (Vendor A) bids \$65,000 and Vendor B bids \$100,000 for monthly cost and service fee and the total points available are Thirty (30), vendor B's cost points are calculated as follows:

\$65,000 / \$100,000 * 30= 19.5

Points will be assigned based on the bidder's clear demonstration of their abilities to complete the work, apply appropriate methods to complete the work, create innovative solutions and quality of past performance in similar projects.

Applicants may be required to submit additional written information or be asked to make an oral presentation before the technical review committee to clarify statements made in their proposal.

SECTION 8: PROPOSAL SUBMISSION

Questions concerning this solicitation may be e-mailed to the Division of Purchases at <u>David.Francis@purchasing.ri.gov</u> no later than the date and time indicated on page one of this solicitation. Please reference **RFP # 7550978** on all correspondence. Questions should be submitted in a Microsoft Word attachment. Answers to questions received, if any, will be posted on the Internet as an addendum to this solicitation. It is the responsibility of all interested parties to download this information. If technical assistance is required to download, call the Help Desk at (401) 574-9709.

Bidders are encouraged to submit written questions to the Division of Purchases. **No other contact with State parties will be permitted**. Interested bidders may submit proposals to provide the services covered by this Request on or before the date and time listed on the cover page of this solicitation. Responses received after this date and time, as registered by the official time clock in the reception area of the Division of Purchases, will not be considered.

Responses (an original plus five (5) copies) should be mailed or hand-delivered in a sealed envelope marked "RFP# 7550978Data Vendor for the Rhode Island All-Payer Claims Database" to:

RI Dept. of Administration Division of Purchases, 2nd floor One Capitol Hill Providence, RI 02908-5855

NOTE: Proposals received after the above-referenced due date and time will not be considered. Proposals misdirected to other State locations or those not presented to the Division of Purchases by the scheduled due date and time will be determined to be late and will not be considered. Proposals faxed or emailed to the Division of Purchases will not be considered. The official time clock is in the reception area of the Division of Purchases.

RESPONSE CONTENTS

Responses shall include the following:

- 1. One completed and signed three-page R.I.V.I.P generated bidder certification cover sheet (included in the original copy only) downloaded from the RI Division of Purchases Internet home page at www.purchasing.ri.gov.
- 2. One completed and signed W-9 (included in the original copy only) downloaded from the RI Division of Purchases Internet home page at www.purchasing.ri.gov.
- 3. **A separate Technical Proposal** as per the specifications in *SECTION 5: TECHNICAL PROPOSAL* of this RFP.
- 4. **A separate, signed and sealed Cost Proposal** proposed to complete all of the requirements of this project, as per the specifications in *SECTION 6: COST PROPOSAL* of this RFP.
- 5. In addition to the multiple hard copies of proposals required, Respondents are requested to provide their proposal in **electronic format** (**CD-ROM**, **disc**, **or flash drive**). Microsoft Word / Excel or PDF format is preferable. Only 1 electronic copy is requested and it should be placed in the proposal marked "original".

CONCLUDING STATEMENTS

Notwithstanding the above, the State reserves the right not to award this contract or to award on the basis of cost alone, to accept or reject any or all proposals, and to award in its best interest.

Proposals found to be technically or substantially non-responsive at any point in the evaluation process will be rejected and not considered further.

The State may, at its sole option, elect to require presentation(s) by bidders in consideration for award.

The State's General Conditions of Purchase contain the specific contract terms, stipulations and affirmations to be utilized for the contract awarded to the RFP. The State's General Conditions of Purchases/General Terms and Conditions can be found at the following URL: https://www.purchasing.ri.gov/RIVIP/publicdocuments/ATTA.pdf.

EXHIBIT A: DATA SUBMISSION AND COLLECTION SCHEDULE

Quarters	File Name	Payers subm file to Lockb Vendor	~ .			Payers submit files to Data Management Vendor		Data Extracts to State Data Center, CTC Analytics	Data Extract is Mapped to BI Tool with Full User Accessibility
	October 2016	All six months by 4/30/17		All six months by 5/15/17		All six months by 5/31/17		0/1/17	0/1/17
4Q2016	November 2016								
	December 2016								
1Q2017	January 2017					All SIX IIIOII	uis by 3/31/17	8/1/17	9/1/17
	February 2017								
	March 2017								
	April 2017	5/31/17	Or all three	6/15/17	Or all three	6/30/17	Or all three		
2Q2017	May 2017	6/30/17	months by 7/31/17	7/15/17	months by	7/31/17	months by	11/1/17	12/1/17
	June 2017	7/31/17		8/15/17	8/15/17	8/31/17	8/31/17		
3Q2017	July 2017	8/31/17	Or all three	9/15/17	Or all three	9/30/17	Or all three		
	August 2017	9/30/17	months by	10/15/17	months by	10/31/17	months by	2/1/18	3/1/18
	September 2017	10/31/17	10/31/17	11/15/17	11/15/17	11/30/17	11/30/17		
	October 2017	11/31/17	Or all three	12/15/17	Or all three	12/31/17	Or all three		
4Q2017	November 2017	12/31/17	months by	1/15/18	months by	1/31/18	months by	5/1/18	6/1/18
	December 2017	1/31/18	1/31/18	2/15/18	2/17/18	2/28/18	2/28/18		

^{*} Reporting period is based on paid date (e.g. Jan 2017 data includes all claims paid in Jan 2017)

EOHHS anticipates that this form of schedule will continue for the entire contract term.

Please note that this schedule is subject to change before the contract start date at EOHHS's sole discretion, and may be made more aggressive if appropriate.

EXHIBIT B: MILESTONES SCHEDULE

All proposals must conform to the following schedule of major deliverables. By responding to this RFP, vendors attest to their capacity to meet these deadlines. Deadlines are based on the assumed contract start date of January 1, 2017. If the actual contract start date is later, this schedule will be adjusted accordingly.

Description	Associated	No Later Than
Transition Plan due	Domain / Task(s) 1A(1)	1/20/17
Project Plan due	1B(2)	1/20/17
Business Rules Document due, Data Quality Plan due	1B(3), 1B(4)	1/20/17
Data transition complete	1A(2)	2/10/17
Deploy Opt-Out Portal Splash Page	2A(2)	2/10/17
Opt-Out Portal design completed	2A(3)	3/10/17
Opt-Out portal testing completed	2A(4)	3/31/17
Reprocessed historic data sent to State Data Center	3B(1)(a)	3/31/17
Opt-Out Portal goes live	2A(5)	4/1/17
Design sessions for business intelligence tool completed	4A(1)	5/15/17
Data submission portal ready to take in data from submitters	3A(1)	5/15/17
First data extract and Level 3 Data Sets sent to State Data Center First RI CTC reports delivered	3C(1), 3C(2), 3C(6)	8/1/17
RI APCD data is mapped and available through BI tool	4A(3)	8/1/17

Please see Exhibit A: Data Submission and Collection Schedule for all additional deadlines.

EXHIBIT C: SERVICE LEVEL REQUIREMENTS

Contractor shall comply with the following Service Level Requirements which shall be incorporated into any applicable RI APCD data vendor contract:

1. General Requirements

- a. **Location.** Any server hosting RI APCD data or providing services to the RI APCD must be located in the United States.
- b. **Privacy and Security Breach Notification.** Contractor must adhere to all applicable federal, state and local laws and regulations regarding privacy and information security. Contractor must notify EOHHS immediately, but in no case in more than twenty-four (24) hours, upon becoming aware of any actual or reasonably suspected unauthorized access to or disclosure of RI APCD data or security incident affecting any RI APCD component or supporting infrastructure.

c. Opt Out Portal

- i. **Availability of Opt Out Portal.** The RI APCD Opt Out Portal shall be available no less than 99 percent of the time, 24 hours per day, 7 days per week and 365 days per year (or 366 days in those years that are leap years), less Excluded Downtime ("Uptime").
- ii. **Excluded Downtime of Opt Out Portal.** All regularly scheduled maintenance must be performed during the hours of 12:00AM (Eastern) on Saturday to 11:59PM (Eastern) on Sunday. Additional maintenance may be performed outside of this window if reasonably deemed necessary; Contractor must provide advance notice of such additional maintenance as soon as reasonably practicable.
- iii. **Unplanned Downtime of Opt Out Portal and Credits.** Uptime below 99 percent in any given month will result in credits to EOHHS as set forth in Table 1 below.
- d. **Response Time.** Contractor must achieve industry standard and reasonable response times for all aspects of provided functionality to include, at a minimum, time required to perform verification and validation activities on submitted RI APCD data.
- e. **Failure Recovery.** Contractor must provide for a recovery from a failure (information technology, telecommunications, or related or comparable failure) in the minimal possible period of time with minimal loss of data.
- f. **Failover Capacity.** Contractor must ensure that, in the event of a failure (information technology, telecommunications, or related or comparable failure) of any operational and technical RI APCD components, Contractor has arranged for failover/contingency capabilities that ensure minimal disruption to operations.

2. Contractor's Responsibilities. Contractor shall:

- a. **Escalation Response**. Respond to any request from the ISW for escalation relative to the services in the Contractor's scope of work as promptly as possible, but in no event later than four hours from delivery of the request by the ISW.
- b. **Deliverable Deadlines.** Deliver all deliverables to the ISW by the deadlines specified in *Exhibit A: Data Submission and Collection Schedule*, *Exhibit B: Milestones Schedule* and *Section 4: Scope of Work*. Contractor's failure to meet deliverable deadlines will result in credits to EOHHS as set forth in Table 1 below. If the Contractor anticipates issues with meeting deadlines, the Contractor shall report to the ISW

the reasons why the deadline cannot be met, the revised timeline for delivery, and proposed mitigation strategies to avoid future delays. The Contractor shall deliver this report to the ISW at least five business days prior to the scheduled deliverable deadline. Based on this report, the ISW may choose to grant an extension for the particular deliverable or instance.

- i. Acceptable Criteria. The ISW will notify the Contractor if deliverables have been accepted, or have failed to meet expected standards, within five business days of receiving the deliverable (the ISW will make every effort to meet this timeframe, however if the ISW does not send feedback within five business days, delivery schedules will be adjusted accordingly). The Contractor shall revise and re-send the deliverable within five business days of receiving feedback. If the revised deliverable is still not acceptable to the ISW, the Contractor shall be subject to Service Level Requirement (SLR) credits as described in Table 1 for each deliverable that is deemed unacceptable.
- c. **Telephone Support.** Provide telephone support from knowledgeable staff members between the hours of 9am and 5pm Eastern Time, Monday through Friday, for the entire contract term. Maintain one or more telephone numbers operable 24 hours a day, 7 days a week for use by the ISW for providing notice of errors or otherwise requesting support under the contract.
- d. **Maintenance and Support.** Provide maintenance and support services to the ISW for the RI APCD as follows:
 - i. The testing and monitoring of the RI APCD data integrity and quality, reporting any data anomalies or errors to the ISW immediately;
 - ii. The correction, modification or substitution of RI APCD data as applicable in order to eliminate errors reported by the ISW to Contractor or discovered by Contractor;
 - iii. The notification of any changes to the RI APCD data architecture which could alter the ETL functions performed by the State Data Center to map the data received from the Contractor to the State Data Center.
- 3. Data Quality and/or Error Response. Immediately upon identifying a data quality issue or error, or receiving notice from the ISW of a data quality issue or error, Contractor shall respond to the data quality issue or error according to the timeline below as applicable. When reporting an issue or error to Contractor, the ISW shall identify the issue/error as a Major Issue/Error or a Minor Issue/Error. If Contractor identifies an issue/error, Contractor shall immediately notify the ISW and identify the issue/error as a Major Issue/Error or a Minor Issue/Error based on Contractor's initial evaluation.
 - a. In the event of a Major Issue/Error, Contractor shall either respond to the ISW's notice of such error or notify the ISW of its identification of the Major Issue/Error, in no less than 4 hours. Contractor shall immediately initiate work on developing a workable solution to the ISW's satisfaction. Contractor shall deliver a work-around solution for the Major Error and install such work-around in accordance with the Agreement, within forty-eight (48) hours of report of the issue/error. Contractor shall use reasonable efforts to deliver a fix for the Major Error and install such fix within seven calendar days of report of the issue/error. If Contractor is unable to deliver a fix within seven days, Contractor shall deliver a good faith estimate of the time necessary to resolve the error.
 - b. In the event of a Minor Issue/Error, Contractor shall either respond to the ISW's notice of such error or notify the ISW of its identification of the Minor Issue/Error, in no less than 72 hours. Contractor shall provide a fix to the Minor Issue/Error, to the ISW's satisfaction, as soon as reasonably possible, but in no event later than two calendar weeks after report of the issue/error.
- **4. Service Level Credits.** Service Level Credits are applied in instances where Contractor fails to meet the Service Level Requirements and the ISW has not granted an extension for that deliverable or instance. Beginning with the contract start date, performance against established Service Level Requirements will be credited according to Table 1. EOHHS may apply Service Level Credits to Contractor's submitted invoice

monthly, or accumulate such factors across a calendar year, at its sole discretion. For example, a 5% credit applied to a monthly invoice for \$10,000 will equal a \$500 penalty, for a total payment of \$9,500.

Table 1: Service Level Requirements as Performance Factors

Service Level Requirement	Standard	Method of Calculation of Credit
Opt Out Portal Uptime	>99% less Excluded	Uptime related credits will be
	Downtime	calculated according to Uptime
		ranges as follows (based on monthly
		Uptime measurement):
		<98.0% = 5% credit
		$98.0\% \le x < 99.5\% = 1\%$ credit
Completion of Deliverables as	Delivery by Date Specified in	Delays in data collection,
Specified in Exhibits A and B	Exhibits A and B	processing, or transmission of extracts/data sets/CTC reports = 2% credit per day late.
		Delays in annual documentation deliverables = 5% credit per week late.
		Deliverable deemed unacceptable by ISW = 2% credit per deliverable. If deliverables are not re-submitted within 5 business days of receiving ISW feedback, credits for late delivery will apply.
		Contractor shall not be paid for deliverables that are not delivered before the next quarterly cycle begins (e.g. if Cycle Q2 deliverable is outstanding as of Cycle Q3 data submission deadline, Contractor will not receive payment for Cycle Q2 deliverable).

APPENDIX 1 – EOHHS BASE CONTRACT

Agreement Number:

AGREEMENT

Between the

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS EXECUTIVE OFFICE OF HEALTH AND HUMAN SERVICES

and

[insert name of Contractor]

Name of Contractor: <u>Name of Contractor</u>

Title of Agreement: <u>ABC Agreement</u>

Basis for Contract: (Ex RFP or LOI #)

Contract Award: \$000,000

Performance Period: <u>July 1, 2016 to June 30, 2017 (EXAMPLE)</u>

AGREEMENT

This agreement, hereinafter "Agreement"	, including a	attached ADDENDA, is	hereby ente	red into this
(DATE PRESENTED)	day of	201#, by and bet	ween the Sta	ate of Rhode
Island acting by and through the Execu	utive Office	of Health and Huma	an Services	(hereinafter
referred to as "the Executive Office"),	, and	(hereina	fter referred	to as "the
Contractor").				

WHEREAS, the Executive Office desires to engage the Contractor to offer services and activities further described, but not limited to the work described in this Agreement, including any Exhibit(s) or Addenda, that are attached hereto and are hereby incorporated by reference into this Agreement.

WHEREAS the Contractor is willing and qualified to provide services, the parties hereto do mutually agree as follows:

PAR. 1. GOVERNING LAW AND GENERAL TERMS AND CONDITIONS

The State's Purchasing Law (Chapter 37-2 of the Rhode Island General Laws) and Rhode Island Department of Administration, Division of Purchases, Purchasing Rules, Regulations, and General Conditions of Purchasing apply as the governing terms and conditions of this Agreement, which can be obtained at http://www.purchasing.ri.gov/rulesandregulations/rulesAndRegulations.aspx. In addition, the provisions of Federal Laws, Regulations and Procedures governing the implementation of federal funds apply to this Agreement. See also PAR. 35. -GOVERNING LAW for further governing law issues. All ADDENDA referenced herein and attached hereto are made a part of and are inclusive in this Agreement.

PAR. 2. PERFORMANCE

The Contractor shall perform all obligations, duties and the required scope of work for the period of time listed in this Agreement, Exhibit(s) and/or Addenda that are attached hereto and are incorporated by reference herein, in a satisfactory manner to be determined at the sole and absolute discretion of the Executive Office, and in accordance with requirements of this Agreement. The Contractor shall perform in accordance with applicable State statutory and policy requirements as well as Federal statutory and policy requirements (as defined in 2 CFR §200.300). More specifically, the **ADDENDUM I - SCOPE OF WORK** shall include performance measurement(s) 2 CFR §200.301, monitoring and reporting program performance 2 CFR §200.328, and performance must be in accordance with requirements for pass-through entities 2 CFR §200.331. The Executive Office shall have the right at any time, to review the work being performed as well as the place where such work is performed; and to that end, the Executive Office shall be given reasonable access to all activities related to this Agreement.

In accordance with 2 CFR §200.331 (d) the Executive Office will:

Monitor the activities of the subrecipient as necessary to ensure that the subaward is used for authorized purposes, in compliance with Federal statutes, regulations, and the terms and conditions of the subaward; and that subaward

performance goals are achieved. Pass-through entity monitoring of the subrecipient must include:

- (1) Reviewing financial and performance reports required by the pass-through entity.
- (2) Following-up and ensuring that the subrecipient takes timely and appropriate action on all deficiencies pertaining to the Federal award provided to the subrecipient from the pass-through entity detected through audits, on-site reviews, and other means.
- (3) Issuing a management decision for audit findings pertaining to the Federal award provided to the subrecipient from the pass-through entity as required by 2 CFR §200.521 Management decision.

The Executive Office may request at any time additional monitoring, reporting, site visits, and audits in accordance with 2 CFR §200.501 or if applicable "Yellow Book" audits (see Paragraph 24). All reports pertaining to 2 CFR §200.331, shall be maintained by the Contractor. The Contractor must retain any documents pertaining to changes requested from the Executive Office or the Federal Government in accordance with 2 CFR §200.333.

PAR. 3. TIME OF PERFORMANCE

The Contractor shall commence performance of this Agreement on the _____ day of _____ 20##, and shall complete performance no later than the _____ day of ____ 20## (hereinafter the "Initial Term"), unless terminated prior to that day by other provisions of this Agreement. *If this contract was awarded as a result of an RFP or bid process, then, by* mutual agreement, this contract may be extended **as stated in the RFP or bid process** (hereinafter "Renewal Term(s)") beyond the Initial Term upon one hundred twenty (120) days prior written notice of the expiration of the Initial Term or any Renewal Term to the Contractor.

In the event the Executive Office or the Contractor gives notice of its intent not to renew this Agreement, the Executive Office shall have the right to extend all or any services to be performed under this Agreement for an additional period of one hundred and eighty (180) days, or such longer period as mutually agreed by the parties in writing.

PAR. 4. PROJECT OFFICER – EXECUTIVE OFFICE

The Executive Office shall appoint a Contract Officer to manage this Agreement. The Contractor agrees to maintain close and continuing communication with the Contract Officer throughout the performance of work and services undertaken under the terms of this Agreement. The Contract Officer is responsible for authorizing, or seeking authorization of all payments made by the Executive Office to the Contractor under this Agreement.

PAR. 5. PROJECT OFFICER – CONTRACTOR

The Contractor shall appoint a Project Officer to be responsible for coordinating and reporting work performed by the Contractor agency under this Agreement. The Project

Officer shall notify the Executive Office in writing immediately, and seek approval from the Executive Office, should a change to this Agreement be necessary in the opinion of the Project Officer. Under no circumstances will a change be undertaken without the prior written approval of the Executive Office.

PAR. 6. BUDGET

Total payment for services to be provided under this Agreement shall not exceed the total budget as detailed in **ADDENDUM II**. Expenditures exceeding budget line-item categories by ten percent (10%) shall not be authorized unless prior written approval is first obtained pursuant to **PAR. 10. - MODIFICATION OF AGREEMENT**, subject to the maximum amount of this Agreement as stated above.

PAR. 7. METHOD OF PAYMENT AND REPORTS

The Executive Office will make payments to the Contractor in accordance with provisions of **ADDENDUM III - PAYMENTS AND REPORTS SCHEDULE** attached hereto and incorporated by reference herein. The Executive Office acknowledges and agrees that any increase in expenses due to delays by the Executive Office which extends the time of performance shall be subject to reimbursement of the costs associated with such delays. The Contractor will complete and forward narrative, fiscal, and all other reports per **ADDENDUM III - PAYMENTS AND REPORTS SCHEDULE.**

PAR. 8. TERMINATION AND/OR DEFAULT OF AGREEMENT

This Agreement shall be subject to termination under any of the following conditions:

- a) <u>Mutual Agreement</u>
 - The contracting parties mutually agree in writing to termination.
- b) <u>Default by Contractor</u>

The Executive Office may, by not less than thirty (30) days prior written notice to the Contractor, terminate the Contractor's right to proceed as to the Agreement if the Contractor:

- 1. Materially fails to perform the services within the time specified or any extension thereof; or
- 2. So fails to make progress as to materially endanger performance of the Agreement in accordance with its terms; or
- 3. Materially breaches any provision of this Agreement.

Termination, at the option of the Executive Office shall be effective not less than thirty (30) days after receipt of such notice, unless the Contractor shall have corrected such failure(s) thirty (30) days after the receipt by the Contractor of such written notice; any failure which, in the exercise of due diligence, cannot be cured within such thirty (30) day period shall not be deemed a default so long as the Contractor shall within such period commence and thereafter continue diligently to cure such failure.

c) Termination in the Interest of the Executive Office

The Executive Office may terminate this agreement at any time by giving written notice to the Contractor of such termination and specifying the effective date thereof, not less than thirty (30) days prior to the effective date of such

termination. In such event, all finished or unfinished documents and other materials shall, at the option of the Executive Office, become its property. If the agreement is terminated by the Executive Office as provided herein, the Contractor will be paid an amount which bears the same rate to the total compensation as the services actually performed bear to the total services of the Contractor covered by this Agreement, less payment of compensation previously made.

PAR. 9. RESPONSIBILITIES UPON TERMINATION AND/OR DEFAULT OF AGREEMENT

Upon delivery to the Contractor of a notice of termination, specifying the nature of the termination, the extent to which performance of work under this contract is terminated, and the date upon which such termination becomes effective, the Contractor shall:

- 1. Stop work under this contract on the date and to the extent specified in the notice of termination.
- 2. Take such action as may be necessary, or as the Executive Office's project manager may reasonably direct, for the protection and preservation of the property related to this contract which is in the possession of the Contractor and in which the Executive Office has or may acquire an interest.
- 3. Terminate all orders to the extent that they relate to the performance of work terminated by the notice of termination.
 - 4. Subject to the provisions of this paragraph, assign to the Executive Office in the manner and to the extent directed by the Executive Office's project officer all of the rights, title, and interest of the Contractor under the orders so terminated, in which case the Executive Office shall have the right, at its discretion, to settle or pay any or all claims arising out of the termination of such orders, however, notwithstanding this provision, the Contractor will not be obligated to assign any such rights, title or interest in the absence of payment therefore by the Executive Office.
 - 5. With the approval or ratification of the Executive Office's project manager, initiate settlement of all outstanding liabilities and all claims, arising out of such termination of orders, the cost of which would be reimbursable in whole or in part, in accordance with the provisions of this contract. Prior to a final settlement of said outstanding liabilities and claims arising out of such termination, final written approval of the Executive Office's project manager must be obtained. Final approval by the Executive Office shall not be unreasonably withheld.
 - 6. Subject to the provisions of this paragraph, transfer title, or if the Contractor does not have title, then transfer their rights to the Executive Office (to the extent that title has not already been transferred) and deliver in the manner, at reasonable times, and to the extent reasonably directed by the Executive Office's project manager all files, processing systems, data manuals, or other documentation, in any form, that relate to all the work completed or in progress prior to the notice of termination.
 - 7. Complete the performance of such part of the work as shall not have been terminated by the notice of termination. The Contractor shall proceed immediately with the performance of the above obligations notwithstanding any delay in determining or adjusting the amount of any item of reimbursable price under this clause.

- 8. Unless terminated by the Executive Office for default of the Contractor, the Contractor shall be entitled to reasonable account shut down expenses associated with such termination including the penalties associated with early termination of lease, software, hardware, and any other unamortized or incremental expenses accrued but not charged, excluding anticipated profits which shall not be reimbursed. The Contractor shall submit all identified shut down expenses associated with such termination incurred before and prior to the termination date. Any damages to the Executive Office shall offset any shutdown expenses to the Executive Office.
- 9. The Contractor acknowledges and agrees the services and/or deliverables provided under this Agreement are very important to the Executive Office and that upon expiration or termination of the Agreement, must be continued without interruption whether by the State, the Executive Office, governmental agency or another private entity ("successor entity"). Prior to the end of the Termination and up to sixty (60) days thereafter, the Contractor agrees to make an orderly transition of contract and/or deliverables hereunder and to perform any and all tasks in good faith that are necessary to preserve the integrity of the work performed by the Contractor on behalf of the Executive Office. Upon termination or expiration of the Agreement, the Contractor, shall, if requested by the Executive Office at least thirty (30) days prior to such termination or expiration, provide reasonable training for the successor entity and/or continued performance of services. For providing such training or continued performance after the Term of the Agreement, the Executive Office shall pay the Contractor at mutually agreed rates for personnel used in providing such training and/or services unless services delivered are already defined herein and rates established then such rates shall apply for such period. Should any missing data, materials, documents, etc., be discovered after expiration or termination, a grace period of one hundred and twenty (120) days shall be in effect during which the data, materials, documents, etc., is to be provided at a predetermined cost or at no additional cost if the Contractor caused the loss. Lost data shall be provided to the Executive Office in form acceptable to the Executive Office.

If a stop work order issued under this clause is canceled or the period of the stop work order or any extension thereof expires, the Contractor shall resume work. The State shall make an equitable adjustment in the delivery schedule, the Agreement price, or both, and the agreement shall be modified, in writing, accordingly, if:

- a) The stop work order results in an increase in the time required for, or in the Contractor's cost properly allocable to the performance of any part of this agreement; and
- b) The Contractor asserts its right to an equitable adjustment within ninety (90) days after the end of the period of work stoppage; provided, that if the state decides the facts justify the action, the state may receive and act upon a proposal submitted at any time before final payment under this Agreement.

The State shall not be liable to the Contractor for loss of profits because of a stop work order issued under this clause, however, unless termination is for a default by the Contractor, the Contractor shall have the right to recover costs associated with maintaining the personnel, leases and equipment during the period of time the stop work order was in effect that cannot otherwise be reasonably utilized by the Contractor

during the stop work period.

If the agreement is terminated for default, following a reasonable notice and cure period not to exceed thirty (30) days unless agreed to by both parties, the Executive Office may withhold payment of any amount in excess of fair compensation for the work actually completed by the Contractor prior to termination of this Agreement and will be entitled to pursue all of its other available legal remedies against the Contractor. Notwithstanding the above, the Contractor shall not be relieved of liability to the Executive Office for damages sustained by virtue of any breach of this Agreement by the Contractor.

The Contractor's liability to the Executive Office for any damages arising out of or related to this Agreement, regardless of the form of action that imposes liability, whether in contract, equity, negligence, intended conduct, tort or otherwise, and including any direct damages incurred by the Executive Office due to the intentional tortious actions of the Contractor in the performance or nonperformance of its obligations under this Agreement is not limited to the total fees paid by the Executive Office to the Contractor under this Agreement. Also, there should be no limitation of the Contractor's liability for disclosure of confidential information or intellectual property infringement. Neither party shall be liable for any amounts for loss of income, profit or savings or incidental, consequential, indirect, exemplary, severance pay, punitive, or special damages of any party, including third parties arising out of or related to this Agreement; provided, however, that the foregoing shall not be deemed to limit in any way the provisions of **ADDENDUM XIII** - **LIQUIDATED DAMAGES** of this Agreement.

The imposition of liquidated damages shall not limit the Executive Office's rights to pursue any other non-monetary remedies available to it.

The Executive Office may, by written notice of default to the Contractor, provide that the Contractor may cure a failure or breach of this contract within a period of thirty (30) days (or such longer period as the Executive Office's agreement administrator or project manager may authorize in writing), said period to commence upon receipt of the notice of default specifying such failure or breach. The Executive Office's exercise of this provision allowing the Contractor time to cure a failure or breach of this Agreement does not constitute a waiver of the Executive Office's right to terminate this Agreement, without providing a cure period, for any other failure or breach of this Agreement.

In the event the Contractor has failed to perform any substantial obligation under this Agreement, or has otherwise committed a breach of this Agreement, the Executive Office may withhold all monies due and payable to the Contractor directly related to the breach, without penalty, until such failure is cured or otherwise adjudicated.

Assurances before breach

a) If documentation or any other deliverables due under this contract are not in accordance with the contract requirements as reasonably determined by the project manager, upon the Executive Office's request, the Contractor, to the extent commercially reasonable, will deliver additional the Contractor resources to the project in order to complete the deliverable as required by the agreement as reasonably determined by the Executive Office and to demonstrate that other project schedules will not be affected. Upon written notice by the Executive Office's project manager of the Executive Office's concerns regarding the quality or timeliness of an

upcoming deliverable, the Contractor shall, within five (5) business days of receipt of said notice, submit a corrective action plan documenting the Contractor's approach to completing the deliverable to the satisfaction of the Executive Office's project officer without affecting other project schedules. The Executive Office's project manager, within five (5) business days of receipt of the corrective action plan, shall approve the plan, reject the plan, or return the plan to the Contractor with specific instructions as to how the plan can be modified to merit approval and a specific time period in which the revised plan must be resubmitted.

Nothing in the language contained in "limitation of liability" article, "Contractor's liability for injury to person's or damage to property" article and "indemnification" article shall be construed to waive or limit the state or federal sovereign immunity or any other immunity from suit provided by law including, but not limited to Rhode Island General Laws, Title 9 Chapter 31, "Governmental Tort Liability."

Executive Office's options at termination

In the event the Executive Office terminates this contract pursuant to this paragraph, the Executive Office may at its option:

- a) Retain all or a portion of such hardware, equipment, software, and documentation as has been provided, obtaining clear title or rights to the same, and procure upon such terms and in such manner as the Executive Office's project manager may deem appropriate, hardware, equipment, software, documentation, or services as are necessary to complete the project; or
- b) Notwithstanding the above, except as otherwise agreed, nothing herein shall limit the right of the Executive Office to pursue any other legal remedies against the Contractor.

In order to take into account any changes in funding levels because of executive or legislative actions or because of any fiscal limitations not presently anticipated, the Executive Office may reduce or eliminate the amount of the contract as a whole with the scope of services being reduced accordingly, or subject to agreement by the parties concerning the scope and pricing, reduce or eliminate any line item(s).

Notwithstanding the terms, conditions and/or requirements set out in Paragraphs 7 and 8, the Contractor shall not be relieved of liability to the Executive Office for damages sustained by the Executive Office by virtue of any breach of the Agreement by the Contractor, and the Executive Office may withhold payment to the Contractor for the purpose of setoff until such time as the exact amount of damages due the Executive Office from the Contractor is determined.

PAR. 10. MODIFICATION OF AGREEMENT

The Executive Office may permit changes in the scope of services, time of performance, or approved budget of the Contractor to be performed hereunder. Such changes, which are mutually agreed upon by the Executive Office and the Contractor, must be in writing and shall be made a part of this agreement by numerically consecutive amendment excluding "Special Projects", if applicable, and are incorporated by reference into this Agreement. No changes are effective unless reflected in an approved change order issued by the State's Division of Purchases.

Special Projects are defined as additional services available to the Executive Office on a time and materials basis with the amounts not to exceed the amounts referenced on the Contractor's RFP cost proposal or as negotiated by project or activity. The change order will specify the scope of the change and the expected completion date. Any change order shall be subject to the same terms and conditions of this Agreement unless otherwise specified in the change order and agreed upon by the parties. The parties will negotiate in good faith and in a timely manner all aspects of the proposed change order.

Availability of Funds

It is understood and agreed by the parties hereto that all obligations of the Executive Office, including the continuance of payments hereunder, are contingent upon the availability and continued appropriation of State and Federal funds, and in no event shall the Executive Office be liable for any payments hereunder in excess of such available and appropriated funds. In the event that the amount of any available or appropriated funds provided by the State or Federal sources for the purchase of services hereunder shall be reduced, terminated or shall not be continued at an aggregate level sufficient to allow for the purchase of the specified amount of services to be purchased hereunder for any reason whatsoever, the Executive Office shall notify the Contractor of such reduction of funds available and the Executive Office shall be entitled to reduce its commitment hereunder as it deems necessary, but shall be obligated for payments due to the Contractor up to the time of such notice. Neither party shall be liable for any amounts for loss of income, profit or savings or incidental, consequential, indirect, exemplary, severance pay, punitive, or special damages of any party, including third parties arising out of or related to this Agreement.

PAR. 11. SUBCONTRACTS

It is expressly agreed that the Contractor shall <u>not</u> enter into any subcontract(s) nor delegate any responsibilities to perform the services listed in this Agreement without the advanced, written approval of the Executive Office. If in **ADDENDUM XVI – BID PROPOSAL**, the Bid Proposal permits Subcontracting, the Contractor must provide the name and the extent of services provided by the Subcontractor in the **BUDGET** paragraph 6, and more fully explained in **ADDENDUM II** of this Agreement, and as further agreed to by the Executive Office and the Contractor in **ADDENDUM IX – SUBCONTRACTOR COMPLIANCE**, which is incorporated by reference herein, and which outlines the expectations and requirements of subcontracted vendors to this Agreement.

If the Contractor subsequently needs to enlist the services of a Subcontractor, the Contractor shall obtain prior written approval of the Executive Office. Approval of the Executive Office for the Contractor to enter into subcontracts to perform the services or obligations of the Contractor pursuant to this Agreement shall not be unreasonably withheld. Nothing in this Agreement or in a subcontract or sub-agreement between the Contractor and subcontractors shall create any contractual relationship between the subcontractor and the Executive Office. Approval by the Executive Office of the Contractor's request to subcontract shall not relieve the Contractor of its responsibilities

under this contract and the Contractor shall therefore remain responsible and liable to the Executive Office for any conduct, negligence, acts and omissions, whether intentional or unintentional, by any subcontractor

The positions named by the Contractor and detailed in **ADDENDUM XVII – CORE STAFF POSITIONS**, which is incorporated by reference herein, will be considered core project staff positions for this project. The Contractor will not alter the core project team or use an independent contractor, company or subcontractor to meet required deliverables without the prior written consent of the Executive Office's project officer or other appointed designee(s) for which consent shall not be unreasonably withheld. Failure to comply with the provisions of this Paragraph could result in denial of reimbursement for such non-approved sub-contracts.

PAR. 12. CONTRACTOR'S LIABILITY/INDEMNIFICATION

The Contractor shall indemnify, defend and hold the State of Rhode Island, its departments, agencies, branches and its or their officers, directors, agents or employees (together the "Indemnitees" and their subcontractors) harmless against claims, demands, suits for judgments, losses or reasonable expenses or costs of any nature whatsoever (including actual reasonable attorney's fees) to the extent arising in whole or part from the Contractor's willful misconduct, negligence, or omission in provision of services or breach of this Agreement including, but not limited to, injuries of any kind which the staff of the Contractor or its subcontractor may suffer directly or may cause to be suffered by any staff person or persons in the performance of this Agreement, unless caused by the willful misconduct or gross negligence of the Indemnitees.

The Contractor shall indemnify, defend and hold the State of Rhode Island, its departments, agencies, branches and its or their officers, directors, agents or employees (together the "Indemnitees" and their subcontractors") harmless against claims, demands, suits for judgments, losses or reasonable expenses or costs of any nature whatsoever (including actual reasonable attorney's fees) to the extent arising in whole or part for infringement by the Contractor of any intellectual property right by any product or service provided hereunder.

Nothing in this agreement shall limit the Contractor's liability to indemnify the State for infringements by the Contractor of any intellectual property right.

Nothing in the language contained in this Agreement shall be construed to waive or limit the State or federal sovereign immunity or any other immunity from suit provided by law including, but not limited to Rhode Island General Law, Title 9, Chapter 31 et al., entitled "Governmental Tort Liability."

PAR. 13. NONDISCRIMINATION IN EMPLOYMENT AND SERVICES

By signing this Agreement, the Contractor agrees to comply with the requirements of Title VI of the Civil Rights Act of 1964 (42 USC 2000d et seq.); Section 504 of the Rehabilitation Act of 1973, as amended (29 USC 794); Americans with Disabilities Act of 1990 (42 USC 12101 et. seq.); Title IX of the Education Amendments of 1972 (20

USC 1681 et. seq.); The Food Stamp Act, and the Age Discrimination Act of 1975, The United States Department of Health and Human Services Regulations found in 45 CFR, Parts 80 and 84; the United States Department of Education Implementing regulations (34 CFR, Parts 104 and 106; and the United States Department of Agriculture, Food and Nutrition Services (7 CFR §272.6), which prohibit discrimination on the basis of race, color, national origin (limited English proficiency persons), age, sex, disability, religion, political beliefs, in acceptance for or provision of services, employment, or treatment in educational or other programs or activities, or as any of the Acts are amended from time to time.

Pursuant to Title VI and Section 504, as listed above and as referenced in **ADDENDA V AND VI**, which are incorporated herein by reference and made part of this Agreement, the Contractor shall have policies and procedures in effect, including, mandatory written compliance plans, which are designed to assure compliance with Title VI section 504, as referenced above. An electronic copy of the Contractor's written compliance plan, all relevant policies, procedures, workflows, relevant chart of responsible personnel, and/or self-assessments must be available to the Executive Office upon request.

The Contractor's written compliance plans and/or self-assessments, referenced above and detailed in **ADDENDA V AND VI** of this Agreement must include but are not limited to the requirements detailed in **ADDENDA V AND VI** of this Agreement.

The Contractor must submit, within thirty-five (35) days of the date of a request by DHHS or EOHHS, full and complete information on Title VI and/or Section 504 compliance and/or self-assessments, as referenced above, by the Contractor and/or any subcontractor or vendor of the Contractor.

The Contractor acknowledges receipt of ADDENDUM V - NOTICE TO EXECUTIVE OFFICE OF HEALTH AND HUMAN SERVICES SERVICE PROVIDERS OF THEIR RESPONSIBILITIES UNDER TITLE VI OF THE CIVIL RIGHTS ACT OF 1964 and ADDENDUM VI - NOTICE TO EXECUTIVE OFFICE OF HEALTH AND HUMAN SERVICES SERVICE PROVIDERS OF THEIR RESPONSIBILITIES UNDER SECTION 504 OF THE REHABILITATION ACT OF 1973, which are incorporated herein by reference and made part of this Agreement.

The Contractor further agrees to comply with all other provisions applicable to law, including the Americans with Disabilities Act of 1990; the Governor's Executive Order No. 05-01, Promotion of Equal Opportunity and the Prevention of Sexual Harassment in State Government.

The Contractor also agrees to comply with the requirements of the Executive Office of Health and Human Services for safeguarding of client information as such requirements are made known to the Contractor at the time of this contract. Changes to any of the requirements contained herein shall constitute a change and be handled in accordance with **PAR. 10. - MODIFICATION OF AGREEMENT** above.

Failure to comply with this Paragraph may be the basis for cancellation of this

Agreement.

PAR. 14. ASSIGNABILITY

The Contractor shall not assign any interest in this Agreement (whether by assignment or novation) without the prior written consent of the State's Division of Purchases, thereto; provided, however, that claims or money due or to become due to the Contractor from the Executive Office under this Agreement may be assigned to a bank, trust company, or other financial institution without such approval. Notice of any such assignment or transfer shall be furnished promptly to the Executive Office.

PAR. 15. COPYRIGHTS

Any and all data, technical information, information systems, materials gathered, originated, developed, prepared, modified, used or obtained by the Contractor in performance of the Agreement used to create and/or maintain work performed by the Contractor, including but not limited to, all hardware, software computer programs, data files, application programs, intellectual property, source code, documentation and manuals, regardless of state of completion shall be deemed to be owned and remain owned by the State ("State Property"), and the State has the right to (1) reproduce, publish, disclose or otherwise use and to authorize others to use the State Property for State or federal government purposes, and (2) receive delivery of such State Property upon 30 days notice by the State throughout the term of the contract and including 120 days thereafter. To be clear with respect to State Property, the work shall be considered "work for hire," i.e., the State, not the selected Contractor or any subcontractor, shall have full and complete ownership of all State Property. The selected Contractor and any subcontractor hereby convey, assign and transfer to State any and all of its or their right, title and interest in State Property, if any, including but not limited to trademarks and The State hereby grants to the federal government, and the federal government reserves, a royalty-free, nonexclusive and irrevocable license to reproduce, publish, disclose or otherwise use and to authorize others to use for federal government purposes such software, modifications and documentation designed, developed or installed with federal financial participation.

The Contractor agrees that no findings, listing, or information derived from information obtained through performance, as described in the Scope of Work in Addendum I with or without identifiers, may be released or publicly disclosed in any form for any purpose if such findings, listing, or information contain any combination of data elements that might allow an individual to determine a beneficiary's identification without first obtaining written authorization from the Executive Office's project officer. Examples of such data elements include, but are not limited to geographic indicators, age, sex, diagnosis, procedure, date of birth, or admission/discharge date(s). The Contractor agrees further that the Executive Office shall be the sole judge as to whether any finding, listing, information, or any combination of data extracted or derived from the Executive Office's files identify or would, with reasonable effort, permit one to identify an individual, or to deduce the identifying of an individual to a reasonable degree of certainty. The Contractor agrees that the conditions set forth herein apply to any materials presented or submitted review and/or publication that contain individual

identifying elements in the information obtained, as stated above, unless such information is presented in the aggregate. Under no circumstance, shall the Contractor publicly disclose or present or submit any materials for review and/or publication that contains an individual's social security number, in part or in whole. The Contractor is hereby notified that all initial data received from EOHHS is considered confidential by the Executive Office. For further requirements regarding confidentiality of information please refer to Paragraph 23 of this Agreement.

With respect to claims arising from computer hardware or software manufactured by a third party and sold by the Contractor as a reseller, the Contractor will pass through to the Executive Office such indemnity rights as it receives from such third party ("third party obligation") and will cooperate in enforcing them; provided that if the third party manufacturer fails to honor the third party obligation, the Contractor will provide the Executive Office with indemnity protection equal to that called for by the third party obligation, but in no event greater than that called for in the first sentence of this Paragraph the provisions of the preceding sentence apply only to third party computer hardware or software sold as a distinct unit and accepted by the Executive Office. Unless a third party obligation provides otherwise, the defense and payment obligations set forth in this Paragraph will be conditional upon the following:

- 1. The Executive Office will notify the Contractor of any such claim in writing and tender the defense thereof within a reasonable time;
- 2. The Contractor will have sole control of the defense of any action on all third party claims, costs (including without limitation reasonable attorneys' fees), and losses for infringement or violation of any U.S. Intellectual Property Rights by any product or service provided hereunder; and all negotiations for its settlement or compromise; provided that (i) when substantial principles of government or public law are involved, when litigation might create precedent affecting future state operations or liability, or when involvement of the state is otherwise mandated by law, the state may participate in such action at its own expense with respect to attorneys' fees and costs (but not liability); (ii) the state will have the right to approve or disapprove any settlement or compromise, which approval will not unreasonably be withheld or delayed; and
- 3. The State will reasonably cooperate in the defense and in any related settlement negotiations.

Should the deliverables or software, or the operation thereof, become, or in the Contractor's opinion are likely to become, the subject of a claim of infringement or violation of a U.S. Intellectual Property Rights, the Executive Office shall permit the Contractor at its option and expense either to procure for the Executive Office the right to continue using the deliverables or software, or to replace or modify the same so that they become non-infringing. If none of these options can reasonably be taken, or if the use of such deliverables or software by the Executive Office shall be prevented by injunction, the Contractor agrees to take back such deliverables or software and make every reasonable effort to assist the Executive Office in procuring substitute deliverables or software. If, in the sole opinion of the Executive Office, the return of such infringing deliverables or software makes the retention of other deliverables or software acquired from the Contractor under this Agreement impractical, the Executive Office shall then have the option of terminating such agreements, or applicable portions

thereof, without penalty or termination charge. The Contractor agrees to take back such deliverables or software and refund any sums the Executive Office has paid the Contractor less any reasonable amount for use or damage.

The Contractor shall have no liability to the Executive Office under any provision of this clause with respect to any claim of patent, copyright or trade secret infringement that is based upon:

- The combination or utilization of deliverables furnished hereunder with equipment or devices not made or furnished by the Contractor; or,
- The operation of equipment furnished by the Contractor under the control of any operating software other than, or in addition to, the current version of the Contractor-supplied operating software; or
- The modification by the Executive Office of the equipment furnished hereunder or of the software; or
- The combination or utilization of software furnished hereunder with non-Contractor supplied software.

The Contractor certifies that it has appropriate systems and controls in place to ensure that Executive Office funds will not be used in the performance of this Agreement for the acquisition, operation or maintenance of computer software in violation of copyright laws.

PAR. 16. PARTNERSHIP

It is understood and agreed that nothing herein is intended or should be construed in any manner as creating or establishing the legal relation of partnership between the parties hereto, or as constituting the employees, agents, or representatives of the Contractor included in this Agreement as employees, agents, or representatives of the Executive Office.

PAR. 17. INTEREST OF CONTRACTOR

The Contractor covenants that it presently has no pecuniary interest and shall not acquire any such interest, direct or indirect, without first disclosing to the Executive Office in writing and then subsequently obtaining approval, in writing, from the Executive Office, that would conflict in any manner or degree with the performance of services required under this Agreement. The Contractor further covenants that no person having any such interest shall be employed by the Contractor for the performance of any work associated with this Agreement.

PAR. 18. FEDERAL FUNDING PROVISIONS

Funds made available to the Contractor under this Agreement are or may be derived from federal funds made available to the Executive Office. The Provisions of Paragraph 5 and Addendum II notwithstanding, the Contractor agrees to make claims for payment under this Agreement in accordance with applicable federal policies. The Contractor agrees that no payments under this Agreement will be claimed for reimbursement under

any other Agreement, grant or contract that the Contractor may hold that provides funding from the same State or Federal sources. The Contractor further agrees to be liable for audit exceptions that may arise from examination of claims for payment under this Agreement. The Contractor specifically agrees to abide by all applicable federal requirements for Contractors, including laws, regulations and requirements related to services performed outside the United States by Contractor or its subcontractors. Additionally, the Federal Award must be used in accordance with the specific Catalog of Federal Domestic Assistance (CFDA) number listed in **ADDENDUM IV – FISCAL ASSURANCES.** https://www.cfda.gov/

States are required to collect information from contractors for awards greater than \$25,000 as described in **ADDENDUM XVIII – FEDERAL SUBAWARD REPORTING** (hereafter referred to as the FFATA form). The Contractor and its subcontractors, if subcontractors are permitted within the scope of this Agreement, will provide new FFATA forms for each contract year. When applicable in multiyear contracts, the Contractor is required to review and update the FFATA form, this must be provided to the Executive Office 30 days prior to the end of the first contract year. For example, if the contract performance period is July 1, 2015 to June 30, 2018; then the FFATA form for the second contract year is due June 1, 2016. Any sub-contractor paid with Federal Funding will provide the FFATA form for each contract year to the Contractor, the Contractor must then provide all sub-contractor FFATA forms to the Executive Office. Sub-contractor forms must be provided within fifteen (15) days of date of signature of this Agreement, and if applicable, within fifteen (15) days of the end of each contract year for all subsequent contract years.

PAR. 19. FUNDING DENIED

It is understood and agreed that in the event that less than full federal funding or other funding is received by the Executive Office due directly to the failure of the Contractor to comply with the terms of this Agreement, the Contractor is liable to the State of Rhode Island for an amount equal to the amount of the denied funding. Should the Contractor be liable for the amount of the denied funding, then such amount shall be payable upon demand of the Executive Office.

The Contractor agrees that no expenditures claimed for reimbursement under this Agreement will be claimed for reimbursement under any other agreement, grant, or contract that the Contractor may hold which provides funding from state or federal sources. The Contractor further agrees to be liable for audit exceptions that may arise from examination of expenditures: (a) claimed by the Contractor for reimbursement under this Agreement, and/or (b) submitted by the Contractor in meeting any cost participation requirements.

PAR. 20. ACCESSIBILITY AND RETENTION OF RECORDS

The Contractor agrees to make accessible and to maintain all fiscal and activity records relating to this Agreement to state and/or federal officials, or their designated representatives, necessary to verify the accuracy of Contractor invoices or compliance with this Agreement. This accessibility requirement shall include the right to review

and copy such records. This requirement is also intended to include but is not limited to any auditing, monitoring, and evaluation procedures, including on-site visits, performed individually or jointly, by state or federal officials or their agents necessary to verify the accuracy of Contractor invoices or compliance with the this Agreement (in accordance with 2 CFR §200.331). If such records are maintained out of the State of Rhode Island, such records shall be made accessible by the Contractor at a Rhode Island location. Minutes of board of directors meetings, fiscal records, and narrative records pertaining to activities performed will be retained for audit purposes for a period of at least three (3) years following the submission of the final expenditure report for this Agreement. Additionally, if any litigation, claim, or audit is started before the expiration of the 3 year period, as mentioned in Paragraph 2 of this Agreement, the records must be retained until all litigation, claims, or audit findings involving the records have been resolved and final action taken in accordance with 2 CFR §200.333. If audit findings have not been resolved at the end of the three (3) years, the records shall be retained for an additional three (3) years after the resolution of the audit findings are made or as otherwise required by law.

The Contractor and its subcontractors, if subcontractors are permitted within the scope of this Agreement, will provide and maintain a quality assurance system acceptable to the state covering deliverables and services under this Agreement and will tender to the state only those deliverables that have been inspected and found to conform to this Agreement's requirements. The Contractor will keep records evidencing inspections and their result, and will make these records available to the state during Agreement performance and for three (3) years after final payment. The Contractor shall permit the state to review procedures, practices, processes, and related documents to determine the acceptability of Contractor's quality assurance system or other similar business practices related to performance of the Agreement.

Further, the Contractor agrees to include a similar right of the state to audit records and interview staff in any subcontract related to performance of this Agreement.

The parties agree that in regards to fixed price portions of the contract, the state's access to the Contractor's books, records and documents shall be limited to those necessary to verify the accuracy of the Contractor's invoice. In no event will the state have access to the Contractors internal cost data as they relate to fixed price portion of the contract.

PAR. 21. CAPITAL ASSETS

The Contractor agrees that any capital assets purchased on behalf of the Executive Office on a pass-through basis and used on behalf of the Executive Office by the Contractor shall upon payment by the Executive Office, become the property of the Executive Office unless otherwise agreed to by the parties and may be utilized by the Contractor in a reasonable manner. Capital assets are defined as any item having a life expectancy of greater than one (1) year and an initial cost of greater than five thousand dollars (\$5,000) per unit, except greater than five hundred dollars (\$500) per unit for computer equipment.

Upon written request by the Executive Office, the Contractor agrees to execute and deliver to the Executive Office a security interest in such capital assets in the amount of the value of such capital asset (or for a lesser amount as determined by the Executive Office).

PAR. 22. COMPETITIVE BIDS

With the exception of services or products obtained for use in a leveraged environment, the Contractor agrees competitive bidding will be utilized for all purchases in direct and exclusive support of the Executive Office which are made under this Agreement in excess of five hundred dollars (\$500) or an aggregate of one thousand dollars (\$1,000) for any like items during the time of performance of this Agreement. Evidence of competitive bids must be retained in accordance with PAR. 20. - ACCESSIBILITY AND RETENTION OF RECORDS.

PAR. 23. SECURITY AND CONFIDENTIALITY

The Contractor shall take security measures to protect against the improper use, loss, access of and disclosure of any confidential information it may receive or have access to under this Agreement as required by this Agreement, the RFP and proposal, or which becomes available to the Contractor in carrying out this Agreement and the RFP and the proposal, and agrees to comply with the requirements of the Executive Office for safeguarding of client and such aforementioned information. Confidential information includes, but is not limited to: names, dates of birth, home and/or business addresses, social security numbers, protected health information, financial and/or salary information, employment information, statistical, personal, technical and other data and information relating to the State of Rhode Island data, and other such data protected by Department/Executive Office laws, regulations and policies ("confidential information"), as well as State and Federal laws and regulations. All such information shall be protected by the Contractor from unauthorized use and disclosure and shall be protected through the observance of the same or more effective procedural requirements as are applicable to the Executive Office.

The Contractor expressly agrees and acknowledges that said confidential information provided to and/or transferred to provider by the Executive Office or to which the Contractor has access to for the performance of this Agreement is the sole property of the Executive Office and shall not be disclosed and/or used or misused and/or provided and/or accessed by any other individual(s), entity(ies) and/or party(ies) without the express written consent of the Executive Office. Further, the Contractor expressly agrees to forthwith return to the Executive Office any and all said data and/or information and/or confidential information and/or database upon the Executive Office's written request and/or cancellation and/or termination of this Agreement.

The Contractor shall not be required under the provisions of this paragraph to keep confidential any data or information, which is or becomes legitimately publicly available, is already rightfully in the Contractor's possession, is independently developed by the Contractor outside the scope of this Agreement, or is rightfully obtained from third parties under no obligation of confidentiality.

The Contractor agrees to abide by all applicable, current and as amended Federal and State laws and regulations governing the confidentiality of information, including to but not limited to the Business Associate requirements of HIPAA (<u>WWW.HHS.GOV/OCR/HIPAA</u>), to which it may have access pursuant to the terms of this Agreement. In addition, the Contractor agrees to comply with the Executive Office confidentiality policy recognizing a person's basic right to privacy and confidentiality of personal information. ("confidential records" are the records as defined as not public in R.I. Gen. Laws 38-2-2-(4) (A)-(AA) entitled "Access to Public Records").

In accordance with this Agreement and all Addenda thereto, the Contractor will additionally receive, have access to, or be exposed to certain documents, records, that are confidential, privileged or otherwise protected from disclosure, including, but not limited to: personal information; Personally Identifiable Information (PII), Sensitive Information (SI), and other information (including electronically stored information), records sufficient to identify an applicant for or recipient of government benefits; preliminary draft, notes, impressions, memoranda, working papers-and work product of state employees; as well as any other records, reports, opinions, information, and statements required to be kept confidential by state or federal law or regulation, or rule of court ("State Confidential Information"). State Confidential Information also includes PII and SI as it pertains to any public assistance recipients as well as retailers within the SNAP Program and Providers within any of the State Public Assistance programs.

Personally Identifiable Information (PII) is defined as any information about an individual maintained by an agency, including, but not limited to, education, financial transactions, medical history, and criminal or employment history and information which can be used to distinguish or trace an individual's identity, either alone or when combined with other personal or identifying information that is linked or linkable to a specific individual, such as their name, social security number, date and place of birth, mother's maiden name, biometric records, etc. (As defined in 2 CFR §200.79 and as defined in OMB Memorandum M-06-19, "Reporting Incidents Involving Personally Identifiable Information and Incorporating the Cost for Security in Agency Information Technology Investments"). PII shall also include individual's first name or first initial and last name in combination with any one or more of types of information, including, but not limited to, social security number, passport number, credit card numbers, clearances, bank numbers, biometrics, date and place of birth, mother's maiden name, criminal, medical and financial records, educational transcripts (As defined in 2 CFR § 200.82 Protected Personally Identifiable Information).

Sensitive Information (SI) is information that is considered sensitive if the loss of confidentiality, integrity, or availability could be expected to have a serious, severe or catastrophic adverse effect on organizational operations, organizational assets, or individuals. Further, the loss of sensitive information confidentiality, integrity, or availability might: (i) cause a significant or severe degradation in mission capability to an extent and duration that the organization is unable to perform its primary functions; (ii) result in significant or major damage to organizational assets; (iii) result in significant or major financial loss; or (iv) result in significant, severe or catastrophic

harm to individuals that may involve loss of life or serious life threatening injuries. (Defined in HHS Memorandum ISP-2007-005, "Departmental Standard for the Definition of Sensitive Information" as amended).

The Contractor agrees to adhere to any and all applicable State and Federal statutes and regulations relating to confidential health care and substance abuse treatment including but not limited to the Federal Regulation 42 CFR, Part 2; Rhode Island Mental Health Law, R.I. General Laws Chapter 40.1-5-26; Confidentiality of Health Care Communications and Information Act, R.I. General Laws Chapter 5-37.3-1 et seq, and HIPAA 45 CFR 160. The Contractor acknowledges that failure to comply with the provisions of this paragraph will result in the termination of this Agreement.

The Contractor shall notify the Executive Office and the Executive Office's designated security officer by telephone call plus e-mail, web form or fax upon the discovery of any breach of security of PHI, PII or SI or suspected breach of security of PHI, PII or SI (where the use or disclosure is not provided for and permitted by this Agreement) of which it becomes aware within one (1) hour and in no case later than forty-eight (48) hours of the breach and/or Security Incident. The Contractor shall, within forty-eight (48) hours, notify the Executive Office and the Executive Office's designated security officer of any suspected breach of unauthorized electronic access, disclosure or breach of confidential information or any successful breach of unauthorized electronic access, disclosure or breach of confidential information. A breach is defined pursuant to HIPAA guidelines as well as those found in the "Health Information Technology for Economic and Clinical Health Act" (HITECH). A breach or suspected breach may be an acquisition, access, use or disclosure or suspected acquisition, access, use or disclosure of PHI in violation of HIPAA privacy rules that compromise PHI security or privacy. Additionally, a breach or suspected breach may be an acquisition, access, use or disclosure or suspected acquisition, access, use or disclosure of PII or SI. The notice of a breach or suspected breach shall contain information available to the Contractor at the time of the notification to aid the Executive Office in examining the matter. More complete and detailed information shall be provided to the Executive Office as it becomes available to the Contractor.

Upon notice of a breach, suspected breach or a security incident, the Executive Office and Contractor will meet to jointly develop an incident investigation and remediation plan. Depending on the nature and severity of the confirmed breach, the plan may include the use of an independent third-party security firm to perform an objective security audit in accordance with recognized cyber security industry commercially reasonable practices. The parties will consider the scope, severity and impact of the security incident to determine the scope and duration of the third party audit. If the parties cannot agree on either the need for or the scope of such audit, then the matter shall be escalated to senior officials of each organization for resolution. The Contractor will pay the costs of all such audits. Depending on the nature and scope of the security incident, remedies may include, among other things, information to individuals on obtaining credit reports and notification to applicable credit card companies, notification to the local office of the Secret Service, and or affected users and other applicable parties, utilization of a call center and the offering of credit monitoring services on a selected basis.

Notwithstanding any other requirement set out in this Agreement, the Contractor acknowledges and agrees that the HITECH Act and its implementing regulations impose new requirements with respect to privacy, security and breach notification and contemplates that such requirements shall be implemented by regulations to be adopted by the U.S. Department of Health and Human Services. The HITECH requirements, regulations and provisions are hereby incorporated by reference into this Agreement as if set forth in this Agreement in their entirety. Notwithstanding anything to the contrary or any provision that may be more restrictive within this Agreement, all requirements and provisions of HITECH, and its implementing regulations currently in effect and promulgated and/or implemented after the date of this Agreement, are automatically effective and incorporated herein. Where this Agreement requires stricter guidelines, the stricter guidelines must be adhered to.

Failure to abide by the Executive Office's confidentiality policy or the required signed **Business Associate Agreement (BAA)** will result in termination remedies, including but not limited to, termination of this Agreement. A **Business Associate Agreement (BAA)** shall be signed by the Contractor, simultaneously or as soon thereafter as possible, from the signing of this Agreement, as required by the Executive Office.

Nothing herein shall limit the Executive Office's ability to seek injunctive relief or any and all damages resulting from the Contractor's negligent or intentional disclosure of confidential information.

PAR. 24. AUDIT

In the case wherein the amount identified in <u>PAR. 6. - BUDGET</u> is at least twenty-five thousand dollars (\$25,000) in any year, at no additional cost for the Executive Office, the Contractor shall prepare an annual financial statement of the Contractor or the Contractor's parent, where applicable, within nine (9) months of the end of the Contractor's fiscal year. The financial statements must provide full and frank disclosures of all assets, liabilities, changes in the fund balances, all revenue, and all expenditures. Upon written or oral request by the Executive Office, the Contractor shall provide the Executive Office a copy of the above described financial statement(s) within ten (10) days of the Executive Office's request or within twenty (20) days of the end of the Time of Performance, Paragraph 3 herein. If additional financial documentation is required by the Federal funding source, these additional financial requirements must be met in addition to the preparation of the above financial statements.

In the case wherein the amount identified in **PAR. 6. - BUDGET** is at least seven hundred and fifty thousand federal dollars (\$750,000) in any fiscal year, at no additional cost for the Executive Office, the audit must be performed in accordance with 2 CFR § 200.500 et. seq., or with "Government Auditing Standards" as published by the Comptroller General of the United States. The audit must address areas of compliance and internal controls as outlined in 2 CFR §200.500 et. seq. If a management letter is also issued as part of the audit, the management letter must be submitted as well (2 CFR §200.512). All financial statements and audits must be submitted in a format that is acceptable to the Executive Office.

In the case wherein the Contractor expends \$750,000 or more during the non–Federal entity's fiscal year in Federal awards must have a single or program-specific audit conducted for that year in accordance with the provisions of 2 CFR § 200.501, et seq. at no additional cost for the Executive Office, the audit must be performed in accordance with 2 CFR §200.500 et. seq., or with "Government Auditing Standards" as published by the Comptroller General of the United States. The audit must address areas of compliance and internal controls as outlined in 2 CFR § 200.500 et. seq. If a management letter is also issued as part of the audit, the management letter must be submitted as well (2 CFR §200.512). All financial statements and audits must be submitted in a format that is acceptable to the Executive Office.

Moreover, if the Contractor has Agreements and/or Federal Awards which <u>in</u> <u>aggregate</u> are at least seven hundred and fifty thousand federal dollars (\$750,000) in any fiscal year, including the amount identified in <u>PAR. 6 – BUDGET</u>, the audit must be performed in accordance with federal requirements as outlined above (2 CFR \$200.500 et seq.).

Should the Contractor expend less than seven hundred and fifty thousand federal dollars (\$750,000) in a fiscal year and be, therefore, exempt from having to perform an audit in accordance with 2 CFR §200.500 et. seq., the Contractor may not charge the cost of such an audit to a federal award.

Pursuant to 2 CFR §200.501 (h), "for-profit" entities shall conduct a "Yellow Book" audit annually by a Public Accounting Firm in accordance with Government Auditing Standards, mentioned above, and standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the U.S. (GAGAS) and provide a copy thereof to Client, the Contractor may not charge the cost of such an audit to a federal award.

The Contractor agrees that the state or its designated representative will be given access to any part of the system which is delivered under this Agreement to inventory and/or inspect the system.

The Contractor expressly agrees that any overpayment identified through an audit must be repaid to the Executive Office within a period of six (6) months from the issuance of the audit.

PAR. 25. SEVERABILITY

If any provision of this Agreement is held invalid, the remainder of this Agreement shall not be affected thereby if such remainder would then continue to conform to the terms and requirements of applicable law.

PAR. 26. ON-SITE INSPECTION

The Contractor agrees to permit on-site monitoring, evaluation and inspection of all activities related to the Agreement by officials of the Executive Office, its designee, and where appropriate, the Federal government. On-site inspections and monitoring shall be

in accordance with 2 CFR §200.328. All reports pertaining to 2 CFR §200.331, shall be maintained by the Contractor. The Contractor must retain any documents pertaining to changes requested from the Executive Office or the Federal Government in accordance with 2 CFR §200.333.

If, as a result of on-site inspections, changes are requested by the Executive Office to ensure compliance with this Agreement and/or Federal Awards, the Contractor must perform changes within a time period defined by the Executive Office. All changes shall be documented by the Contractor and provided to the Executive Office upon request. All requested changes shall comply with 2 CFR §200.331.

PAR. 27. DRUG-FREE WORKPLACE POLICY

The Contractor agrees to comply with the provisions of the Governor's Executive Order 91-14, the State's Drug Free Workplace Policy, and the Federal Omnibus Drug Abuse Act of 1988. As a condition of contracting with the State of Rhode Island, the Contractor hereby agrees to abide by ADDENDUM VII - DRUG-FREE WORKPLACE POLICY, and in accordance therewith has executed ADDENDUM VIII - DRUG-FREE WORKPLACE POLICY CONTRACTOR CERTIFICATE OF COMPLIANCE.

Furthermore, the Contractor agrees to submit to the Executive Office any report or forms which may from time-to-time be required to determine the Contractor's compliance with this policy.

The Contractor acknowledges that a violation of the Drug-Free Workplace Policy may, at the Executive Office's option, result in termination of this Agreement.

PAR. 28. PRO-CHILDREN ACT OF 1994 (ACT)

As a condition of contracting with the State of Rhode Island, the Contractor hereby agrees to abide by ADDENDUM X - CERTIFICATION REGARDING ENVIRONMENTAL TOBACCO SMOKE, and in accordance has executed ADDENDUM X - CERTIFICATION REGARDING ENVIRONMENTAL TOBACCO SMOKE.

PAR. 29. DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

The Contractor agrees to abide by ADDENDUM XI – INSTRUCTIONS FOR CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS – PRIMARY COVERED TRANSACTIONS, and in accordance has executed the required certification included in ADDENDUM XII – CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS – PRIMARY COVERED TRANSACTIONS.

PAR. 30. CHIEF PURCHASING OFFICER

This Agreement shall take effect upon the issuance of a Purchase Order by the State of Rhode Island's Chief Purchasing Officer or his/her designee. No modifications to this

agreement shall be effective unless in an authorized change order issued by the State's Division of Purchases.

PAR. 31. OWNERSHIP

The following additional paragraphs are added to the Rhode Island Department of Administration, Division of Purchases, Purchasing Rules, Regulations, and General Conditions of Purchasing.

<u>PROPRIETARY SOFTWARE</u>. Each party will retain all rights in any software, ideas, concepts, know-how, development tools, techniques or any other proprietary material or information that it owned or developed prior to the date of this Agreement, or acquired or developed after the date of this Agreement without reference to or use of the intellectual property of the other party. All software that is licensed by a party from a third party vendor will be and remain the property of such vendor.

DEVELOPED SOFTWARE. All software that is developed by the Contractor and delivered by the Contractor to the Executive Office under this Agreement, and paid for by the Executive Office ("Developed Software") is and shall remain the property of the Executive Office. For a period of ninety (90) days following acceptance of any developed software in accordance with the approval procedures adopted by the parties, the Contractor warrants that each item of developed software will conform in all material respects to the written technical specifications agreed to by the parties in accordance with the software development methodologies adopted by the parties and set forth in the procedures manual. As soon as reasonably practicable after discovery by State or Contractor of a failure of the Developed Software to so conform (a "non**conformance**"), State or Contractor, as applicable, will deliver to the other a statement supporting documentation describing in reasonable detail the alleged If Contractor confirms that there is a non-conformance, then Contractor will use commercially reasonable efforts to correct such non-conformance. The methods and techniques for correcting non-conformances will be at the sole discretion of the Executive Office. The foregoing warranty will not extend to any nonconformances caused (i) by any change or modification to software without Contractor's prior written consent; or (ii) by state operating software otherwise than in accordance with the applicable documentation, for the purpose for which it was designed, or on hardware not recommended, supplied or approved in writing by Contractor. Furthermore, if, after undertaking commercially reasonable efforts to remedy a breach by Contractor of the foregoing warranty, Contractor, in the exercise of its reasonable business judgment, determines that any repair, adjustment, modification or replacement is not feasible, or in the event that the developed software subsequent to all repairs, adjustments, modifications and replacements continues to fail to meet the foregoing warranty, the Executive Office will return the developed software to Contractor, and Contractor will credit to the State, in a manner and on a schedule agreed to by the parties and as the Executive Office's sole and exclusive remedy for such failure, an amount equal to the charges actually paid by the Executive Office to the Contractor for the developed software that has failed to meet the foregoing warranty. Upon written request of the Executive Office, the Contractor will use commercially reasonable efforts to correct an alleged non-conformance for which Contractor is not otherwise responsible hereunder

because it is caused or contributed to by one of the factors listed above and, to the extent that such correction cannot be performed within the scope of the Contractor services, such correction will be paid for by the Executive Office at the Contractor's then current commercial billing rates for the technical and programming personnel and other materials utilized by the Contractor. Notwithstanding anything to the contrary in this Agreement, the Contractor will continue to own, and will be free to use, the development tools and the residual technology, so long as such use does not breach Contractor's obligations of confidentiality set forth herein

OTHER. Notwithstanding anything to the contrary in this Agreement, the Contractor (i) will retain all right, title and interest in and to all know-how, intellectual property, methodologies, processes, technologies, algorithms, software or development tools used in performing the services hereunder which are based on trade secrets or proprietary information of the Contractor, are developed or created by or on behalf of the Contractor without reference to or use of the intellectual property of the Executive Office or are otherwise owned or licensed by the Contractor (collectively, "tools"); (ii) subject to the confidentiality obligations set forth in this Agreement, will be free to use the ideas, concepts, methodologies, processes and know-how which are developed or created in the course of performing the services and may be retained by the Contractor's employees in an intangible form, all of which constitute substantial rights on the part of the Contractor in the technology developed as a result of the services performed under this Agreement; and (iii) will retain ownership of any Contractor-owned software or tools that are used in producing the developed software and become embedded therein. No licenses will be deemed to have been granted by either party to any of its patents, trade secrets, trademarks or copyrights, except as otherwise expressly provided in this Agreement.

PAR. 32. FORCE MAJEURE

Except for defaults of subcontractors at any tier, in the event that any party is unable to perform any of its obligations under this Agreement or to enjoy any of its benefits because of (or if failure to perform the services is caused by) natural disaster, actions or decrees of governmental bodies, or other event or failure not the fault or within control of the affected party (hereinafter referred to as a "Force Majeure Event"), the party who has been so affected shall immediately give notice to the other parties and shall use reasonable efforts to resume performance. Upon receipt of such notice, all obligations under this Agreement shall be immediately suspended

PAR. 33. RESERVED

PAR. 34. DISPUTES

The parties shall use good faith efforts to cooperatively resolve disputes and problems that arise in connection with this Agreement. When a dispute arises between the Executive Office and Contractor, both parties will attempt to resolve the dispute pursuant to this subsection. When a dispute arises, the party initiating the dispute shall notify the other party in writing of the dispute, with the notice specifying the disputed issues and the position of the party submitting the notice. The Executive Office's project

officer and Contractor project officer shall use good faith efforts to resolve the dispute within ten (10) State business days of submission by either party to the other of such notice of the dispute.

If the Executive Office's Project Officer and the Contractor's Project Officer are unable to resolve the dispute, either party may request that the dispute be escalated for resolution to the Secretary of the Executive Office of Health and Human Services or his or her designee, the Contractor's President or his or her designee and a mutually agreed upon third party shall attempt to resolve the issue.

If the issue is not resolved, the parties shall proceed pursuant to R.I. General Laws § 37-2-46 and applicable State Procurement Regulations (1.5).

If the issue is not resolved, the parties shall endeavor to resolve their claims by mediation which, shall be administered by the Presiding Justice of the Providence County Superior Court. A request for mediation shall be made in writing, delivered to the other party to the Agreement, and filed with the court. The request may be made concurrently with the filing of binding dispute resolution proceedings but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of sixty (60) days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration is stayed pursuant to this paragraph, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.

The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the State of Rhode Island where the project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

PAR. 35. GOVERNING LAW

This Agreement is deemed executed and delivered in the City of Cranston, State of Rhode Island, and all questions arising out of or under this Agreement shall be governed by the laws of the State of Rhode Island.

PAR. 36. WAIVER AND ESTOPPEL

Nothing in this Agreement shall be considered waived by any party, unless the party claiming the waiver receives the waiver in writing. No breach of this Agreement is considered to be waived unless the non-breaching party waives it in writing. A waiver of one provision shall not constitute a waiver of any other. A failure of any party to enforce at any time any provisions(s) of this contract, or to exercise any option which is herein provided, shall in no way be construed as a waiver of such provision of this contract. No consent, or excuse by either party, express or implied, shall constitute a subsequent consent, waiver or excuse.

PAR. 37. INSURANCE

Throughout the term of the Agreement, the Contractor and any subcontractor shall procure and maintain, at its own cost and expense, insurance as required by the Bid Specifications.

PAR. 38. WORK REVIEWS

The Contractor agrees that all work performed under this Agreement may be reviewed by the Rhode Island Executive Office of Health and Human Services, Department of Administration, and/or by any third party designated by the Executive Office of Health and Human Services.

PAR. 39. BUSINESS CONTINUITY PLAN

The Contractor shall prepare and maintain a Business Continuity Plan upon execution of this Agreement, which shall include, but not be limited to, the Contractor's procedure for recovery of data and recovery for all operation components in case of an emergency or disaster. Upon written or oral request by the Executive Office, the Contractor shall provide the Executive Office a copy of the above described Business Continuity Plan within ten (10) days of the Executive Office's request.

PAR. 40. NOTICES

No notice, approval or consent permitted or required to be given by this Agreement will be effective unless the same is in writing and sent postage prepaid, certified mail or registered mail, return receipt requested, or by reputable overnight delivery service to the other party at the address set forth in **ADDENDUM XVII – CORE STAFF POSITIONS**, or such other address as either party may direct by notice given to the other as provided **ADDENDUM XVII – CORE STAFF POSITIONS**, and shall be deemed to be given when received by the addressee. The Contractor and the Executive Office shall list, in **ADDENDUM XVII – CORE STAFF POSITIONS**, the names, addresses, email addresses, telephone numbers, and the facsimile numbers of all individuals that the above such notice, approval or consent shall be sent to or copied on. The Parties agree to update any changes to the designated notice recipients, in writing pursuant to the terms outlined in **PARAGRAPH 40**.

PAR. 41. COUNTERPARTS

This Agreement may be executed in any number of counterparts, each of which will be an original, and such counterparts together will constitute one and the same instrument. Execution may be effected by delivery of facsimiles of signature pages and the parties will follow such delivery by prompt delivery of originals of such pages.

PAR. 42. AMENDMENTS

Except as may otherwise set forth in this Agreement, the Agreement may only be amended by the parties agreeing to the amendment, in writing, duly executed by the parties and shall only be effective upon incorporation by the State's Division of Purchases through the issuance of a change order.

PAR. 43. SURVIVAL

Any obligations and provisions of this Agreement which by their nature extend beyond the expiration or termination of this Agreement, including but not limited to safeguarding confidential information and indemnification, shall survive the expiration or termination of this Agreement.

PAR. 44. ADDITIONAL APPROVALS

The parties acknowledge that this Agreement requires issuance of a valid Purchase Order by the State of Rhode Island for this Agreement to remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have hereunder set their hands as of the date first above written and this Agreement made legally binding upon the issuance of a valid Purchase Order by the State of Rhode Island as follows:

STATE OF RHODE ISLAND: ***INSEF	RT CONTRACTOR NAME***:
ELIZABETH H. ROBERTS, SECRETARY EXECUTIVE OFFICE OF HEALTH AND HUMAN SERVICES	AUTHORIZED AGENT/SIGNATURE TITLE:
	PRINT NAME
DATE	DATE

ADDENDA

Attached hereto, incorporated into and made a part herein of this agreement, are the following addenda:

<u>ADDENDUM I</u> - REQUEST FOR PROPOSAL AND/OR SCOPE OF WORK

ADDENDUM II- BUDGET

ADDENDUM III - PAYMENTS AND REPORTS SCHEDULE

<u>ADDENDUM IV</u> - FISCAL ASSURANCES

ADDENDUM V - NOTICE TO EXECUTIVE OF HUMAN SERVICES' SERVICE

PROVIDERS OF THEIR RESPONSIBILITIES UNDER TITLE VI

OF THE CIVIL RIGHTS ACT OF 1964

ADDENDUM VI - NOTICE TO EXECUTIVE OFFICE OF HEALTH AND HUMAN

SERVICES' SERVICE PROVIDERS OF THEIR RESPONSIBILITIES UNDER SECTION 504 OF THE

REHABILITATION ACT OF 1973

<u>ADDENDUM VII</u> - DRUG-FREE WORKPLACE POLICY

ADDENDUM VIII - DRUG FREE WORKPLACE POLICY CONTRACTOR CERTIFICATE

OF COMPLIANCE

<u>ADDENDUM IX</u> - SUBCONTRACTOR COMPLIANCE

<u>ADDENDUM X</u> - CERTIFICATION REGARDING ENVIRONMENTAL TOBACCO

SMOKE

ADDENDUM XI - INSTRUCTIONS FOR CERTIFICATION REGARDING DEBARMENT.

SUSPENSION AND OTHER RESPONSIBILITY MATTERS -

PRIMARY COVERED TRANSACTIONS

ADDENDUM XII - CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND

OTHER RESPONSIBILITY MATTERS - PRIMARY COVERED

TRANSACTIONS

<u>ADDENDUM XIII</u> - LIQUIDATED DAMAGES

<u>ADDENDUM XIV</u> - EQUAL EMPLOYMENT OPPORTUNITY

<u>ADDENDUM XV</u> - BYRD ANTI-LOBBYING AMENDMENT

ADDENDUM XVI - BID PROPOSAL

ADDENDUM XVII - CORE STAFF POSITIONS

<u>ADDENDUM XVIII</u> - FEDERAL SUBAWARD REPORTING

<u>ADDENDUM XIX</u> - BUSINESS ASSOCIATE AGREEMENT

ADDENDUM I

REQUEST FOR PROPOSAL / SCOPE OF WORK

ADDENDUM II BUDGET

ADDENDUM III PAYMENTS AND REPORTS SCHEDULE

ADDENDUM IV FISCAL ASSURANCES

- 1. The Contractor agrees to segregate all receipts and disbursements pertaining to this agreement from recipients and disbursements from all other sources, whether by separate accounts or by utilizing a fiscal code system.
- 2. The Contractor assures a system of adequate internal control will be implemented to ensure a separation of duties in all cash transactions.
- 3. The Contractor assures the existence of an audit trail which includes: cancelled checks, voucher authorization, invoices, receiving reports, and time distribution reports.
- 4. The Contractor assures a separate subsidiary ledger of equipment and property will be maintained.
- 5. The Contractor agrees any unexpended funds from this agreement are to be returned to the Executive Office at the end of the time of performance unless the Executive Office gives written consent for their retention.
- 6. The Contractor assures insurance coverage is in effect in the following categories: bonding, vehicles, fire and theft, and liability.
- 7. The following Federal requirements shall apply pursuant to OMB Guidance for Grants and Agreements. Where applicable:
 - Subpart A Acronyms and Definitions (200.0 200.99)
 - Subpart B General Provisions (200.100 200.113)
 - Subpart C Pre-Federal Award Requirements and Contents of Federal Awards (200.200 200.211)
 - Subpart D Post Federal Award (200.300 200.345)
 - Subpart E Cost Principles (200.400 200.475)
 - Subpart F Audit Requirements(200.500 200.521)
 - All Subsequent Addenda
- 8. If the Contractor expends Federal awards during the Contractor's particular fiscal year of \$750,000 or more, then 2 CFR § 200.500 et. seq., audits of states, local governments and non-profit organizations shall also apply or if applicable, an audit shall be performed in accordance with "Government Auditing Standards" as published by the Comptroller General of the United States (see Paragraph 24).
- 9. This agreement may be funded in whole or in part with Federal funds. If so, the CFDA reference number is _______. The Contractor must review applicable Federal Statutes, regulations, terms and conditions of the Federal Award in accordance with 2 CFR § 200.331 (a)(2).

ADDENDUM V

RHODE ISLAND EXECUTIVE OFFICE OF HEALTH AND HUMAN SERVICES

NOTICE TO EXECUTIVE OFFICE OF HEALTH AND HUMAN SERVICES' SERVICE PROVIDERS OF THEIR RESPONSIBILITIES UNDER TITLE VI OF THE CIVIL RIGHTS ACT OF 1964

Public and private agencies, organizations, institutions, and persons that receive Federal financial assistance through the Executive Office of Health and Human Services (EOHHS) are subject to the provisions of Title VI of the Civil Rights Act of 1964 and the implementing regulations of the United States Department of Health And Human Services (DHHS), which is located at 45 CFR, Part 80, collectively referred to hereinafter as Title VI. EOHHS contracts with Contractors include a Contractor's assurance that in compliance with Title VI and the implementing regulations, no person shall be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in its programs and activities on the grounds of race, color, or national origin. Additional DHHS guidance is located at 68 FR 47311-02.

EOHHS reserves its right to at any time review Contractors to assure that they are complying with these requirements. Further, EOHHS reserves its right to at any time require from Contractors, Sub-Contractors and Vendors that they are also complying with Title VI.

The Contractor shall have policies and procedures in effect, including, a mandatory written compliance plan, which are designed to assure compliance with Title VI. An electronic copy of the service providers written compliance plan and all relevant policies, procedures, workflows and relevant chart of responsible personnel must be available to EOHHS upon request.

The Contractor's written compliance plan must address the following requirements:

- □ Written policies, procedures and standards of conduct that articulate the organization's commitment to comply with all Title VI standards.
- □ Designation of a compliance officer who is accountable to the service provider's senior management.
- □ Effective training and education for the compliance officer and the organization's employees.
- □ Enforcement of standards through well-publicized guidelines.
- Provision for internal monitoring and auditing.
- □ Written complaint procedures
- □ Provision for prompt response to all complaints, detected offenses or lapses, and for development and implementation of corrective action initiatives.
- □ Provision that all Contractors, Sub-Contractors and Vendors of the service provider execute assurances that said Contractors, Sub-Contractors and Vendors are in compliance with Title VI.

The Contractor must enter into an agreement with each Sub-Contractor or Vendor under which there is the provision to furnish to it, DHHS or EOHHS on request full and complete information related to Title VI compliance.

The Contractor must submit, within thirty-five (35) days of the date of a request by DHHS or EOHHS, full and complete information on Title VI compliance by the Contractor and/or any Sub-Contractor or Vendor of the Contractor.

It is the responsibility of each Contractor to acquaint itself with all of the provisions of the Title VI regulations. A copy of the regulations is available upon request from the community relations liaison officer, **Executive Office of Health and Human Services**, 57 Howard Avenue, Cranston, RI 02920; telephone number: (401) 462-5274.

THE REGULATIONS ADDRESS THE FOLLOWING TOPICS:

SECTION: PURPOSE 80.1 80.2 APPLICATION OF THIS REGULATION 80.3 **DISCRIMINATION PROHIBITED** ASSURANCES REOUIRED 80.4 80.5 ILLUSTRATIVE APPLICATION 80.6 **COMPLIANCE INFORMATION** 80.7 CONDUCT OF INVESTIGATIONS 80.8 PROCEDURE FOR EFFECTING COMPLIANCE 80.9 **HEARINGS DECISIONS AND NOTICES** 80.10 80.11 JUDICIAL REVIEW 80.12 EFFECT ON OTHER REGULATIONS; FORMS AND INSTRUCTIONS 80.13 DEFINITION

ADDENDUM VI

RHODE ISLAND EXECUTIVE OFFICE OF HEALTH AND HUMAN SERVICES

NOTICE TO RHODE ISLAND EXECUTIVE OFFICE OF HEALTH AND HUMAN SERVICES' CONTRACTORS OF THEIR RESPONSIBILITIES UNDER SECTION USC 504 OF THE REHABILITATION ACT OF 1973

Public and private agencies, organizations, institutions, and persons that receive Federal financial assistance through the **Executive Office Of Health and Human Services (EOHHS)** are subject to the provisions of Section 504 of the Rehabilitation Act of 1973 and the Implementing Regulations of the United States Department of Health And Human Services (DHHS), which are located at 45 CFR, part 84 hereinafter collectively referred to as Section 504. EOHHS contracts with service providers include the provider's assurance that it will comply with Section 504 of the regulations, which prohibits discrimination against handicapped persons in providing health, welfare, or other social services or benefits.

The Contractor shall have policies and procedures in effect, including, a mandatory written compliance plan, which are designed to assure compliance with Section 504. An electronic copy of the Contractor's written compliance plan and all relevant policies, procedures, workflows and relevant chart of responsible personnel must be available to EOHHS upon request.

The Contractor's written compliance plan must address the following requirements:

- □ Written policies, procedures and standards of conduct that articulate the organization's commitment to comply with all Section 504 standards.
- □ Designation of a compliance officer who is accountable to the service provider's senior management.
- □ Effective training and education for the compliance officer and the organization's employees.
- □ Enforcement of standards through well-publicized guidelines.
- □ Provision for internal monitoring and auditing.
- □ Written complaint procedures
- □ Provision for prompt response to all complaints, detected offenses or lapses, and for development and implementation of corrective action initiatives.
- □ Provision that all Contractors, Sub-Contractors and Vendors of the service provider execute assurances that said Contractors, Sub-Contractors and Vendors are in compliance with Section 504.

The Contractor must enter into an agreement with each Sub-Contractor or Vendor under which there is the provision to furnish to the contractor, DHHS or EOHHS on request full and complete information related to Section 504 compliance.

The contractor must submit, within thirty-five (35) days of the date of a request by DHHS or EOHHS, full and complete information on Section 504 compliance by the Contractor and/or any Sub-Contractor or Vendor of the contractor.

It is the responsibility of each Contractor to acquaint itself with all of the provisions of the Section 504 regulations. A copy of the regulations, together with an August 14, 1978 Policy Interpretation of General Interest to Providers of Health, Welfare, or Other Social Services or Benefits, is available upon

request from the Community Relations Liaison Officer, **Executive Office of Health and Human Services**, 57 Howard Avenue, Cranston, RI 02920; telephone number (401) 462-5274.

Contractors should pay particular attention to subparts A, B, C, and F of the regulations which pertain to the following:

SUBPART A - GENERAL PROVISIONS

SECTION:

- 84.1 PURPOSE
- 84.2 APPLICATION
- 84.3 DEFINITIONS
- 84.4 DISCRIMINATION PROHIBITED
- 84.5 ASSURANCE REQUIRED
- 84.6 REMEDIAL ACTION, VOLUNTARY ACTION, AND SELF-EVALUATION
- 84.7 DESIGNATION OF RESPONSIBLE EMPLOYEE AND ADOPTION OF GRIEVANCE PROCEDURES
- 84.8 NOTICE
- 84.9 ADMINISTRATIVE REQUIREMENTS FOR SMALL RECIPIENTS
- 84.10 EFFECT OF STATE OR LOCAL LAW OR OTHER REQUIREMENTS AND EFFECT OF EMPLOYMENT OPPORTUNITIES

SUBPART B - EMPLOYMENT PRACTICES

SECTION:

- 84.11 DISCRIMINATION PROHIBITED
- 84.12 REASONABLE ACCOMMODATION
- 84.13 EMPLOYMENT CRITERIA
- 84.14 PREEMPLOYMENT INQUIRIES
- 84.15 84.20 (RESERVED)

SUBPART C - ACCESSIBILITY

SECTION:

- 84.21 DISCRIMINATION PROHIBITED
- 84.22 EXISTING FACILITIES
- 84.23 NEW CONSTRUCTION
- 84.24 84.30 (RESERVED)

SUBPART F - HEALTH, WELFARE, AND SOCIAL SERVICES

SECTION:

- 84.51 APPLICATION OF THIS SUBPART
- 84.52 HEALTH, WELFARE, AND OTHER SOCIAL SERVICES
- 84.53 DRUG AND ALCOHOL ADDICTS
- 84.54 EDUCATION AND INSTITUTIONALIZED PERSONS
- 84.55 PROCEDURES RELATING TO HEALTH CARE FOR HANDICAPPED INFANTS
- 84.56 84.60 (RESERVED)

ADDENDUM VII

DRUG-FREE WORKPLACE POLICY

Drug use and abuse at the workplace or while on duty are subjects of immediate concern in our society. These problems are extremely complex and ones for which there are no easy solutions. From a safety perspective, the users of drugs may impair the well-being of all employees, the public at large, and result in damage to property. Therefore, it is the policy of the state that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited in the workplace. Any employee(s) violating this policy will be subject to discipline up to and including termination. An employee may also be discharged or otherwise disciplined for a conviction involving illicit drug use, regardless of whether the employee's conduct was detected within employment hours or whether his/her actions were connected in any way with his or her employment. The specifics of this policy are as follows:

- 1. Any unauthorized employee who gives or in any way transfers a controlled substance to another person or sells or manufactures a controlled substance while on duty, regardless of whether the employee is on or off the premises of the employer will be subject to discipline up to and including termination.
- 2. The term "controlled substance" means any drugs listed in 21 USC, Section 812 and other Federal regulations. Generally, all illegal drugs and substances are included, such as marijuana, heroin, morphine, cocaine, codeine or opium additives, LSD, DMT, STP, amphetamines, methamphetamines, and barbiturates.
- 3. Each employee is required by law to inform the agency within five (5) days after he/she is convicted for violation of any Federal or State criminal drug statute. A conviction means a finding of guilt (including a plea of nolo contendere) or the imposition of a sentence by a judge or jury in any Federal or State Court.
- 4. The employer (the hiring authority) will be responsible for reporting conviction(s) to the appropriate Federal granting source within ten (10) days after receiving notice from the employee or otherwise receives actual notice of such conviction(s). All conviction(s) must be reported in writing to the Office of Personnel Administration (OPA) within the same time frame.
- 5. If an employee is convicted of violating any criminal drug statute while on duty, he/ she will be subject to discipline up to and including termination. Conviction(s) while off duty may result in discipline or discharge.
- 6. The state encourages any employee with a drug abuse problem to seek assistance from the Rhode Island Employee Assistance Program (RIEAP). Your Personnel Officer has more information on RIEAP.
- 7. The law requires all employees to abide by this policy.

ADDENDUM VIII DRUG-FREE WORKPLACE POLICY CONTRACTOR CERTIFICATE OF COMPLIANCE

I,	, (Name)	(Title)	(Contractor Name), a
contractor doing bus	siness with the state of	Rhode Island, hereby	acknowledge that I have received a
copy of the state's po	olicy regarding the maint	enance of a Drug-Free	Workplace. I have been informed
that the unlawful ma	anufacture, distribution,	dispensation, possession	on, or use of a controlled substance
(to include but not la	imited to such drugs as	marijuana, heroin, coc	aine, PCP, and crack, and may also
include legal drugs v	which may be prescribed	d by a licensed physicia	an if they are abused), is prohibited
on the State's premi	ises or while conductin	g State business. I ack	nowledge that my employees must
report for work in a f	it condition to perform t	heir duties.	
	y the state's policy. Furth		Omnibus Drug Act, I will require my violation of this policy may result
SIGNATURE:			
TITLE:			-
DATE:			

ADDENDUM IX

SUBCONTRACTOR COMPLIANCE

subcontractors perf with (***CONTR	forming services pursua	f Rhode Island, hereby nt to this agreement wi All such contracts sl	(Contractor Name), a y certify that all approved all have executed written contracts hall contain language identical to
PAR. 12.	CONTRACTOR'S	S LIABILITY/INDE	MNIFICATION
PAR. 13.	NONDISCRIMINA	ATION IN EMPLOY	YMENT AND SERVICES
PAR. 18.	FEDERAL FUND	ING PROVISIONS	
SIGNATURE:			
TITLE:			_
DATE:			

ADDENDUM X

CERTIFICATION REGARDING ENVIRONMENTAL TOBACCO SMOKE

Public Law 103-227, Part c - Environmental Tobacco Smoke (20 U.S.C.A.§ 6081-6084), also known as the Pro-Children Act of 1994 (Act), requires that smoking not be permitted in any portion of any indoor facility owned or leased or contracted for by an entity and used routinely or regularly for the provision of health, day care, education, or library services to children under the age of 18, if the services are funded by Federal programs either directly or through state or local governments, by Federal grant, contract, loan, or loan guarantee. The law does not apply to children's services provided in private residences, facilities funded solely by Medicare or Medicaid funds, and portions of facilities used for inpatient drug or alcohol treatment.

Any failure to comply with a prohibition in this section shall be a violation of this section and any person subject to such prohibition who commits such violation may be liable to the United States for a civil penalty in an amount not to exceed \$1,000 for each violation, or may be subject to an administrative compliance order, or both, as determined by the Secretary. Each day a violation continues shall constitute a separate violation. In the case of any civil penalty under this section, the total amount shall not exceed the amount of Federal funds received by such person for the fiscal year in which the continuing violations occurred.

By signing and submitting this application the applicant/contractor certifies that it will comply with the requirements of the Act. The applicant/contractor further agrees that it will require the language of this certification be included in any sub-awards which contain provisions for children's services and that all sub-contractors shall certify accordingly.

SIGNATURE:	_
TITLE:	
DATE:	

ADDENDUM XI

INSTRUCTIONS FOR CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

PRIMARY COVERED TRANSACTIONS

By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.

- 1. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. If necessary, the prospective participant shall submit an explanation of why it cannot provide the certification. The certification or explanation will be considered in connection with the Executive Office's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or explanation shall disqualify such person from participation in this transaction.
- 2. The certification in this clause is a material representation of fact upon which reliance was placed when the Executive Office determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Executive Office. The Executive Office may terminate this transaction for cause or default.
- 3. The prospective primary participant shall provide immediate written notice to the Executive Office if at any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 4. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the definitions and coverage sections of the rules implementing Executive Order 12549.
- 5. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the Executive Office.
- 6. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled certification regarding debarment, suspension, ineligibility and voluntary exclusion lower tier covered transactions, provided by the Executive Office, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- 7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible,

or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the non-procurement list (of excluded parties).

- 8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by as prudent person in the ordinary course of business dealings.
- 9. Except for transactions authorized under Paragraph 6 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the Executive Office may terminate this transaction for cause of default.

ADDENDUM XII

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS – PRIMARY COVERED TRANSACTIONS

The contractor, as the primary participant, certifies to the best of the contractor's knowledge and belief, that the contractor and its principals:

- 1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- Have not within a three (3) year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under public transaction; violation of federal or state antitrust statues or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- 3. Are not presently indicated or otherwise criminally or civilly charged by a governmental entity (federal, State or local) with commission of any of the offenses enumerated in paragraph 2 of this certification; and
- 4. Have not within a three (3) year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

Where the prospective primary participant is unable to certify to any of the statement in this certification, such prospective participant shall attach an explanation to this proposal.

SIGNATURE:	
TITLE:	
DATE:	

ADDENDUM XIII

LIQUIDATED DAMAGES

The prospective primary participant contractor agrees that time is of the essence in the performance of certain designated portions of this contract. The Executive Office and the contractor agree that in the event of a failure to meet the milestones and project deliverable dates or any standard of performance within the time set forth in the Executive Office 's bid proposal and the contractor's proposal response (Addendum XVI), damage shall be sustained by the Executive Office and that it may be impractical and extremely difficult to ascertain and determine the actual damages which the Executive Office will sustain by reason of such failure. It is therefore agreed that Executive Office, at its sole option, may require the contractor to pay liquidated damages for such failures with the following provisions:

- 1. Where the failure is the sole and exclusive fault of the Executive Office, no liquidated damages shall be imposed. To the extent that each party is responsible for the failure, liquidated damages shall be reduced by the apportioned share of such responsibility.
- 2. For any failure by the contractor to meet any performance standard, milestone or project deliverable, the Executive Office may require the contractor to pay liquidated damages in the amount(s) and as set forth in the state's general conditions of purchase as described particularly in the LOI, RFP, RFQ, or scope of work, however, any liquidated damages assessed by the Executive Office shall not exceed 10% of the total amount of any such month's invoice in which the liquidated damages are assessed and shall not in the aggregate, over the life of the agreement, exceed the total contract value.

Written notification of failure to meet a performance requirement shall be given by the Executive Office 's project officer to the contractor's project officer. The contractor shall have a reasonable period designated by the Executive Office from the date of receipt of written notification. If the failure is not materially resolved within this period, liquidated damages may be imposed retroactively to the date of expected delivery.

In the event that liquidated damages have been imposed and retained by the Executive Office, any such damages shall be refunded, provided that the entire system takeover has been accomplished and approved by the Executive Office according to the original schedule detailed in the contractor's proposal response included in this contract (Addendum XVI) as modified by mutually agreed upon change orders.

To the extent liquidated damages have been assessed, such damages shall be the sole monetary remedy available to the Executive Office for such failure. This does not preclude the state from taking other legal action.

ADDENDUM XIV

EQUAL EMPLOYMENT OPPORTUNITY

During the performance of this agreement, the contractor agrees as follows:

- 1. The Contractor shall not discriminate against any employee or applicant for employment relating to this agreement because of race, color, religious creed, sex, national origin, ancestry, age, physical or mental disability, unless related to a bona fide occupational qualification. The Contractor shall take affirmative action to ensure that applicants are employed and employees are treated equally during employment, without regard to their race, color, religion, sex, age, national origin, or physical or mental disability.
 - Such action shall include but not be limited to the following: employment, upgrading, demotions, or transfers; recruitment or recruitment advertising; layoffs or terminations; rates of pay or other forms of compensation; and selection for training including apprenticeship. The Contractor agrees to post in conspicuous places available to employees and applicants for employment notices setting forth the provisions of this nondiscrimination clause.
- 2. The Contractor shall, in all solicitations or advertising for employees placed by or on behalf of the contractor relating to this agreement, state that all qualified applicants shall receive consideration for employment without regard to race, color, religious creed, sex, national origin, ancestry, age, physical or mental disability.
- 3. The Contractor shall inform the contracting Executive Office's equal employment opportunity coordinator of any discrimination complaints brought to an external regulatory body (RI Ethics Commission, RI Department of Administration, US DHHS Office of Civil Rights) against their agency by any individual as well as any lawsuit regarding alleged discriminatory practice.
- 4. The Contractor shall comply with all aspects of the Americans with Disabilities Act (ADA) in employment and in the provision of service to include accessibility and reasonable accommodations for employees and clients.
- 5. Contractors and subcontractors with agreements in excess of \$50,000 shall also pursue in good faith affirmative action programs.
- 6. The Contractor shall cause the foregoing provisions to be inserted in any subcontract for any work covered by this agreement so that such provisions shall be binding upon each subcontractor, provided that the foregoing provisions shall not apply to contracts or subcontracts for standard commercial supplies or raw materials.

ADDENDUM XV

BYRD ANTI-LOBBYING AMENDMENT

No Federal or State appropriated funds shall be expended by the contractor for influencing or attempting to influence an officer or employee of any agency, a member of congress or State Legislature, an officer or employee of congress or state legislature, or an employee of a member of congress or state legislature in connection with any of the following covered actions: the awarding of any agreement; the making of any grant; the entering into of any cooperative agreement; and the extension, continuation, renewal, amendment, or modification of any agreement, grant, or cooperative agreement. Signing this agreement fulfills the requirement that contractors receiving over \$100,000 in Federal or State funds file with the Executive Office on this provision.

If any Non-Federal or State Funds have been or will be paid to any person in connection with any of the covered actions in this provision, the Contractor shall complete and submit a "Disclosure of Lobbying Activities" form.

The Contractor must certify compliance with all terms of the Byrd Anti-Lobbying Amendment (31 U.S.C 1352) as published in the Federal Register May 27, 2003, Volume 68, Number 101.

The Contractor hereby certifies that it will comply with Byrd Anti-Lobbying Amendment provisions as defined in 45 CFR Part 93 and as amended from time to time.

SIGNATURE:	 	
TITLE:		
DATE:		

ADDENDUM XVI BID PROPOSAL

ADDENDUM XVII

CORE STAFF POSITIONS

Executive Office's Project Officer:
Executive Office's Financial Officer:
Contractor's Project Officer:
Contractor's Financial Officer:

ADDENDUM XVIII

FEDERAL SUBAWARD REPORTING FFATA FORM

See Attached RI Office of Management and Budget, Sub-Award Reporting Worksheet

Directions:

For contracts awarding more than \$25,000 in FEDERAL funds, include Transparency Act Questionnaire for agency to complete and return.

If award is not for Federal funds, or is for less than \$25,000, enter "Reserved" under the above heading, and no questionnaire should be provided.

IMPORTANT ITEMS TO NOTE ABOUT NEW REQUIREMENT

The Federal Funding Accountability and Transparency Act (FFATA or Transparency Act - P.L.109-282, as amended by section 6202(a) of P.L. 110-252) requires the Office of Management and Budget (OMB) to maintain a single, searchable website that contains current information on all Federal spending awards. That site is at www.USASpending.gov.

- Includes both mandatory and discretionary grants
- Do not include grants funded by the Recovery Act (ARRA)
- For more information about Federal Spending Transparency, refer to http://www.whitehouse.gov/omb/open
- If the initial award is below \$25,000 but subsequent grant modifications result in a total award equal to or over \$25,000, the award will be subject to the reporting requirements, as of the date the award exceeds \$25,000
- If the initial award equals or exceeds \$25,000 but funding is subsequently de-obligated such that the total award amount falls below \$25,000, the award continues to be subject to the reporting requirements of the Transparency ACT and this Guidance

Rev. 06-2014

Rhode Island Office of Management & Budget

Sub-Award Reporting Worksheet

Please type or print clearly in black or blue ink, answer all questions, and sign and date the form

Piease type	or print c	hearry	mb	Tack	OI DI	ue iiik	, a	nswer an qu	icstiviis, a	nu sig	II all	u uate i	ine ion	11.
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Agency Contact Name								Agend	cy Contact T	elepho	ne			
Sub-Award Program Na	ame							Agend	cy Contact E	mail				
Sub-Award Program De	escription													
					Feder	al Awa	rd I	Information						
Federal Program Name	•							Federal Awa	rding Agend	су				
Federal Award Numbe	r							Date of Fede	ral Award					
Award Type								CFDA Numb	er					
Prime Agency DUNS +4						+		Am	ount Obliga	ated fro	m thi	s Award		
Is sub-award funded by	more than	one fe	deral	awar	d?						Yes *			No
If yes, use Attachment 1-A	to provide inf	ormatio	n on a	dditioi	nal fedei	ral awar	ds f	funding this sub-	award.					
				Sec	tion 2:	Sub-Av	var	dee Informati	ion					
Sub-Awardee DUNS+4					+			System for A Expiration Da		_	Regi	stration		
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City						City								
State						State								
ZIP+4 -	+					ZIP+4			+					
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In preceding fiscal year							-			budget	? If			
no, stop. Do not report													Yes	No
In preceding fiscal year	•								unds? If no,	stop. D	0			
not report executive compensation. Proceed to Sub-Awardee Certification. Yes No						No								
Is information about th	•							•	•					
(including parent organ	-		-				wc	ide) publicly a	valiable? IT	no, rep	ort		V	N-
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† See Federal Register Volu	ime 75, NO. 17	7, Appe	naix A,	Parag					executive com	pensatio	n.			
					Sub-A	Awarde	e C	Certification						
I certify, to the best of n contracts and other lega effect as my written sign	Illy binding d						-	•						_
Signatu	re					Titl	e o	of Signatory					Date	
	Section 3	: Sub-A	ward	Infor	mation	ı (for st	ate	e agency admi	nistrative n	urposes	only)		
								-Award Date				, A Report	Manakh	
Sub-Award Number														

Section 3: Sub-Award Information (for state agency administrative purposes only)					
Sub-Award Number	Sub-Award Date	FFATA Report Month			
Amendment 1 Obligation Amount	Amendment 1 Date	FFATA Report Month			
Amendment 2 Obligation Amount	Amendment 2 Date	FFATA Report Month			

APPENDIX 2 – MEASURE ALIGNMENT SET

Measure Name	NQF Number	Steward	Domain	Population	Data Source	
30-day Psychiatric Inpatient Readmission	NA	State of Washington DSHS	Behavioral health	Adult	Claims	
Anti-depressant Medication Management	0105	NCQA	Behavioral health	Adult	Claims	
Follow-Up After Hospitalization for Mental Illness	0576	NCQA	Behavioral health	Adult and Pediatric (6 yrs and older)	Claims	
Follow-Up Care for Children Prescribed Attention- Deficit/Hyperactivity Disorder Medication	0108	NCQA	Behavioral health	Pediatric	Claims	
Initiation and Engagement of Alcohol and Other Drug Dependence Treatment	0004	NCQA	Behavioral health	Adult	Claims	
Medication Management for People with Asthma	1799	NCQA	Chronic Illness	Adult and Pediatric (5 yrs and older)	Claims	
Comprehensive Diabetes Care: Eye Exam	0055	NCQA	Chronic illness care Diabetes	Adult	Claims	
Cesarean Rate for Nulliparous Singleton Vertex (PC-02)	0471	The Joint Commission	Institutional Care	Adult	Claims	
READM-30-AMI: Heart Attack Readmit	0505	CMS	Institutional Care	Adult	Claims	
READM-30-HF: Heart Failure Readmit	0330	CMS	Institutional Care	Adult	Claims	
READM-30-HOSP-WIDE: Hospital-wide Readmit	1789	CMS	Institutional Care	All	Claims	
READM-30-PN: Pneumonia Readmit	0506	CMS	Institutional Care	Adult	Claims	
Adolescent Well Care Visits (AWC)	NA	NCQA	Preventive Care Pediatric	Pediatric	Claims	
Breast Cancer Screening	2372	NCQA	Preventive Care	Adult	Claims	
Chlamydia Screening	0033	NCQA	Preventive Care	Adult (16 to 24 yrs)	Claims	
Appropriate Testing for Children with Pharyngitis	0002	NCQA	Overuse	Pediatric	Claims	
Use of Imaging Studies for Low Back Pain	0052	NCQA	Overuse	Adult	Claims	
Plan All-Cause Readmission	1768	NCQA	Overuse	Adult	Claims	
Percent of Prescriptions that are Generic Scripts		N/A	Utilization	All	Claims	
Inpatient Visits/1000 (Inpatient Utilization - General Hospital/Acute Care)		NCQA	Utilization	All	Claims	
Skilled Nursing Facility 30-Day All-Cause Readmission Measure (SNFRM)	2510	CMS	Overuse	Adult	Claims	
Lead Screening for Children (LSC)	NA	NCQA	Preventive Care Pediatric	Pediatric	Claims	
Ambulatory Care (ED rate rate only; ED visits per 1000; ED Utilization)	NA	NCQA	Utilization	All	Claims	
Developmental Screening In the First Three Years of Life	1448	NCQA	Preventive	Pediatric	Claims	

INSTRUCTIONS FOR COMPLETING THE DATA USE AGREEMENT (DUA) FORM CMS-R-0235

(AGREEMENT FOR USE OF CENTERS FOR MEDICARE & MEDICAID SERVICES (CMS) DATA CONTAINING INDIVIDUAL IDENTIFIERS)

This agreement must be executed prior to the disclosure of data from CMS' Systems of Records to ensure that the disclosure will comply with the requirements of the Privacy Act, the Privacy Rule and CMS data release policies. It must be completed prior to the release of, or access to, specified data files containing protected health information and individual identifiers.

Directions for the completion of the agreement follow:

Before completing the DUA, please note the language contained in this agreement cannot be altered in any form.

- First paragraph, enter the Requestor's Organization Name.
- Section #1, enter the Requestor's Organization Name.
- Section #4 enter the Study and/or Project Name and CMS contract number if applicable for which the file(s) will be used.
- Section #5 should delineate the files and years the Requestor is requesting. Specific file names should be completed. If these are unknown, you may contact a CMS representative to obtain the correct names The System of Record (SOR) should be completed by the CMS contact or Project Officer. The SOR is the source system the data came from.
- Section #6, complete by entering the Study/Project's anticipated date of completion.
- Section #12 will be completed by the User.
- Section #16 is to be completed by Requestor.
- Section #17, enter the Custodian Name, Company/Organization, Address, Phone Number (including area code), and E-Mail Address (if applicable). The Custodian of files is defined as that person who will have actual possession of and responsibility for the data files. **This section should be completed even if the Custodian and Requestor are the same.** This section will be completed by Custodian.
- Section #18 will be completed by a CMS representative.
- Section #19 should be completed if your study is funded by one or more other Federal Agencies. The Federal Agency name (other than CMS) should be entered in the blank. The Federal Project Officer should complete and sign the remaining portions of this section. If this does not apply, leave blank.
- Sections #20a AND 20b will be completed by a CMS representative.
- Addendum, CMS-R-0235A, should be completed when additional custodians outside the requesting organization will be accessing CMS identifiable data.

Once the DUA is received and reviewed for privacy and policy issues, a completed and signed copy will be sent to the Requestor and CMS Project Officer, if applicable, for their files.

DATA USE AGREEMENT

DUA #	

(AGREEMENT FOR USE OF CENTERS FOR MEDICARE & MEDICAID SERVICES (CMS) DATA CONTAINING INDIVIDUAL IDENTIFIERS)
MS agrees to provide the User with data that reside in a CMS Privacy Act System of Records as identified in this greement. In exchange, the User agrees to pay any applicable fees; the User agrees to use the data only for purposes at support the User's study, research or project referenced in this Agreement, which has been determined by CMS to ovide assistance to CMS in monitoring, managing and improving the Medicare and Medicaid programs or the services ovided to beneficiaries; and the User agrees to ensure the integrity, security, and confidentiality of the data by complying the the terms of this Agreement and applicable law, including the Privacy Act and the Health Insurance Portability and countability Act. In order to secure data that reside in a CMS Privacy Act System of Records; in order to ensure the egrity, security, and confidentiality of information maintained by the CMS; and to permit appropriate disclosure and use such data as permitted by law, CMS and enter into this reement to comply with the following specific paragraphs.
1. This Agreement is by and between the Centers for Medicare & Medicaid Services (CMS), a component of the U.S. Department of Health and Human Services (HHS), and, hereinafter termed "User."
2. This Agreement addresses the conditions under which CMS will disclose and the User will obtain, use, reuse and disclose the CMS data file(s) specified in section 5 and/or any derivative file(s) that contain direct individual identifiers or elements that can be used in concert with other information to identify individuals. This Agreement supersedes any and all agreements between the parties with respect to the use of data from the files specified in section 5 and preempts and overrides any instructions, directions, agreements, or other understanding in or pertaining to any grant award or other prior communication from the Department of Health and Human Services or any of its components with respect to the data specified herein. Further, the terms of this Agreement can be changed only by a written modification to this Agreement or by the parties adopting a new agreement. The parties agree further that instructions or interpretations issued to the User concerning this Agreement or the data specified herein, shall not be valid unless issued in writing by the CMS point-of-contact or the CMS signatory to this Agreement shown in section 20.
3. The parties mutually agree that CMS retains all ownership rights to the data file(s) referred to in this Agreement, and that the User does not obtain any right, title, or interest in any of the data furnished by CMS.
4. The User represents, and in furnishing the data file(s) specified in section 5 CMS relies upon such representation, that such data file(s) will be used solely for the following purpose(s).
me of Study/Project
1S Contract No. (If applicable)

The User represents further that the facts and statements made in any study or research protocol or project plan submitted to CMS for each purpose are complete and accurate. Further, the User represents that said study protocol(s) or project plans, that have been approved by CMS or other appropriate entity as CMS may determine, represent the total use(s) to which the data file(s) specified in section 5 will be put.

The User agrees not to disclose, use or reuse the data covered by this agreement except as specified in an Attachment to this Agreement or except as CMS shall authorize in writing or as otherwise required by law, sell, rent, lease, loan, or otherwise grant access to the data covered by this Agreement. The User affirms that the requested data is the minimum necessary to achieve the purposes stated in this section. The User agrees that, within the User organization and the organizations of its agents, access to the data covered by this Agreement shall be limited to the minimum amount of data and minimum number of individuals necessary to achieve the purpose stated in this section (i.e., individual's access to the data will be on a need-to-know basis).

5. The following CMS data file(s) is/are covered under this Agreement.

File	Years(s)	System of Record

6. The parties mutually agree that the aforesaid files(s) (and/or any derivative file(s)), including those files that directly identify individuals or that directly identify bidding firms and/or such firms' proprietary, confidential or specific bidding information, and those files that can be used in concert with other information to identify individuals, may be retained by the User until ________, hereinafter known as the "Retention Date." The User agrees to notify CMS within 30 days of the completion of the purpose specified in section 4 if the purpose is completed before the aforementioned retention date. Upon such notice or retention date, whichever occurs sooner, the User agrees to destroy such data. The User agrees to destroy and send written certification of the destruction of the files to CMS within 30 days. The User agrees not to retain CMS files or any parts thereof, after the aforementioned file(s) are destroyed unless the appropriate Systems Manager or the person designated in section 20 of this Agreement grants written authorization. The User acknowledges that the date is not contingent upon action by CMS.

The Agreement may be terminated by either party at any time for any reason upon 30 days written notice. Upon notice of termination by User, CMS will cease releasing data from the file(s) to the User under this Agreement and will notify the User to destroy such data file(s). Sections 3, 4, 6, 8, 9, 10, 11, 13, 14 and 15 shall survive termination of this Agreement.

- 7. The User agrees to establish appropriate administrative, technical, and physical safeguards to protect the confidentiality of the data and to prevent unauthorized use or access to it. The safeguards shall provide a level and scope of security that is not less than the level and scope of security requirements established by the Office of Management and Budget (OMB) in OMB Circular No. A-130, Appendix III--Security of Federal Automated Information Systems (http://www.whitehouse.gov/omb/circulars/a130/a130.html) as well as Federal Information Processing Standard 200 entitled "Minimum Security Requirements for Federal Information and Information Systems" (http://csrc.nist.gov/publications/fips/fips200/FIPS-200-final-march.pdf); and, Special Publications/053 "Recommended Security Controls for Federal Information Systems" (http://csrc.nist.gov/publications/nistpubs/800-53-Rev2/sp800-53-rev2-final.pdf). The User acknowledges that the use of unsecured telecommunications, including the Internet, to transmit individually identifiable, bidder identifiable or deducible information derived from the file(s) specified in section 5 is prohibited. Further, the User agrees that the data must not be physically moved, transmitted or disclosed in any way from or by the site indicated in section 17 without written approval from CMS unless such movement, transmission or disclosure is required by a law.
- 8. The User agrees to grant access to the data to the authorized representatives of CMS or DHHS Office of the Inspector General at the site indicated in section 17 for the purpose of inspecting to confirm compliance with the terms of this agreement.

- 9. The User agrees not to disclose direct findings, listings, or information derived from the file(s) specified in section 5, with or without direct identifiers, if such findings, listings, or information can, by themselves or in combination with other data, be used to deduce an individual's identity. Examples of such data elements include, but are not limited to geographic location, age if > 89, sex, diagnosis and procedure, admission/discharge date(s), or date of death.
 - The User agrees that any use of CMS data in the creation of any document (manuscript, table, chart, study, report, etc.) concerning the purpose specified in section 4 (regardless of whether the report or other writing expressly refers to such purpose, to CMS, or to the files specified in section 5 or any data derived from such files) must adhere to CMS' current cell size suppression policy. **This policy stipulates that no cell (e.g. admittances, discharges, patients, services) 10 or less may be displayed.** Also, no use of percentages or other mathematical formulas may be used if they result in the display of a cell 10 or less. By signing this Agreement you hereby agree to abide by these rules and, therefore, will not be required to submit any written documents for CMS review. If you are unsure if you meet the above criteria, you may submit your written products for CMS review. CMS agrees to make a determination about approval and to notify the user within 4 to 6 weeks after receipt of findings. CMS may withhold approval for publication only if it determines that the format in which data are presented may result in identification of individual beneficiaries.
- 10. The User agrees that, absent express written authorization from the appropriate System Manager or the person designated in section 20 of this Agreement to do so, the User shall not attempt to link records included in the file(s) specified in section 5 to any other individually identifiable source of information. This includes attempts to link the data to other CMS data file(s). A protocol that includes the linkage of specific files that has been approved in accordance with section 4 constitutes express authorization from CMS to link files as described in the protocol.
- 11. The User understands and agrees that they may not reuse original or derivative data file(s) without prior written approval from the appropriate System Manager or the person designated in section 20 of this Agreement.
- 12. The parties mutually agree that the following specified Attachments are part of this Agreement:

13. The User agrees that in the event CMS determines or has a reasonable belief that the User has made or may have made a use, reuse or disclosure of the aforesaid file(s) that is not authorized by this Agreement or another written authorization from the appropriate System Manager or the person designated in section 20 of this Agreement, CMS, at its sole discretion, may require the User to: (a) promptly investigate and report to CMS the User's determinations regarding any alleged or actual unauthorized use, reuse or disclosure, (b) promptly resolve any problems identified by the investigation; (c) if requested by CMS, submit a formal response to an allegation of unauthorized use, reuse or disclosure; (d) if requested by CMS, submit a corrective action plan with steps designed to prevent any future unauthorized uses, reuses or disclosures; and (e) if requested by CMS, return data files to CMS or destroy the data files it received from CMS under this agreement. The User understands that as a result of CMS's determination or reasonable belief that unauthorized uses, reuses or disclosures have taken place, CMS may refuse to release further CMS data to the User for a period of time to be determined by CMS.

The User agrees to report any breach of personally identifiable information (PII) from the CMS data file(s), loss of these data or disclosure to any unauthorized persons to the CMS Action Desk by telephone at (410) 786-2580 or by e-mail notification at cms_it_service_desk@cms.hhs.gov within one hour and to cooperate fully in the federal security incident process. While CMS retains all ownership rights to the data file(s), as outlined above, the User shall bear the cost and liability for any breaches of PII from the data file(s) while they are entrusted to the User. Furthermore, if CMS determines that the risk of harm requires notification of affected individual persons of the security breach and/or other remedies, the User agrees to carry out these remedies without cost to CMS.

- 14. The User hereby acknowledges that criminal penalties under \$1106(a) of the Social Security Act (42 U.S.C. \$1306(a)), including a fine not exceeding \$10,000 or imprisonment not exceeding 5 years, or both, may apply to disclosures of information that are covered by \$1106 and that are not authorized by regulation or by Federal law. The User further acknowledges that criminal penalties under the Privacy Act (5 U.S.C. \$552a(i) (3)) may apply if it is determined that the Requestor or Custodian, or any individual employed or affiliated therewith, knowingly and willfully obtained the file(s) under false pretenses. Any person found to have violated sec. (i)(3) of the Privacy Act shall be guilty of a misdemeanor and fined not more than \$5,000. Finally, the User acknowledges that criminal penalties may be imposed under 18 U.S.C. \$641 if it is determined that the User, or any individual employed or affiliated therewith, has taken or converted to his own use data file(s), or received the file(s) knowing that they were stolen or converted. Under such circumstances, they shall be fined under Title 18 or imprisoned not more than 10 years, or both; but if the value of such property does not exceed the sum of \$1,000, they shall be fined under Title 18 or imprisoned not more than 1 year, or both.
- 15. By signing this Agreement, the User agrees to abide by all provisions set out in this Agreement and acknowledges having received notice of potential criminal or administrative penalties for violation of the terms of the Agreement.
- 16. On behalf of the User the undersigned individual hereby attests that he or she is authorized to legally bind the User to the terms this Agreement and agrees to all the terms specified herein.

Name and Title of User (typed or printed)			
Company/Organization			
Street Address			
City	State		ZIP Code
Office Telephone (Include Area Code)		E-Mail Addre	ess (If applicable)
Signature			Date
to notify CMS within fifteen (15) days disapprove the appointment of a custod	of any change of any requision or may requision of appointm	of custodianship juire the appoin nent as Custodia	an of the aforesaid file(s) on behalf of the
Company/Organization			
Street Address			
City	State		ZIP Code
Office Telephone (Include Area Code)		E-Mail Addre	ess (If applicable)
Signature			Date

follow(s). (To be completed by CM		•			use(s) stated in section 4
19. On behalf of the aforesaid Federal agency sponsor to support CMS in ensuring that the Agreement, and agrees further to mak Agreement and to refer all question CMS official named in section 20 (compared to the compared to the co	ors or otherwise sup to User maintains are seen o statement to the s of such interpreta	pports the User's duses CMS's duses CMS's duser concerning tion or compliant	s request for ata in accord ng the interpr	and use dance wiretation o	of CMS data, agrees th the terms of this f the terms of this
Typed or Printed Name		Title of Feder	al Represen	tative	
Signature		<u> </u>			Date
Office Telephone (Include Area Code)		E-Mail Addres	S (If applicable	e)	
Agreement on behalf of CMS. On behalf of CMS the undersigned Agreement and agrees to all the term. Name of CMS Representative (typed or pr	ms specified herein		she is autho	orized to	enter into this
Title/Component					
Street Address				Mail St	op
City	State		ZIP Code	ı	
Office Telephone (Include Area Code)		E-Mail Addres	S (If applicable	e)	
A. Signature of CMS Representative					Date
B. Concur/Nonconcur — Signature of CI	MS System Manag	er or Business C	Owner		Date
Concur/Nonconcur — Signature of CM	S System Manage	r or Business Ov	vner		Date
Concur/Nonconcur — Signature of CM	S System Manage	r or Business Ov	wner		Date

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0938-0734. The time required to complete this information collection is estimated to average 30 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to: CMS, 7500 Security Boulevard, Attn: Reports Clearance Officer, Baltimore, Maryland 21244-1850.

<u>APPENDIX 4 – LEVEL 3 EXTRACT SPECIFICATIONS</u>

Level 3 Extract	Extract Column Name	Description	Data Type
Medical Claims Header			
Core & Extended Extract	Claim_ID	Unique claim identifier.	BIGINT
Core & Extended Extract	Person_ID	Person_ID is a value created to link payer member records -within and across data sources (i.e. submissions to the APCD). These links are identified via a matching process that associates common elements belonging to a person. Several member records (from disparate sources) may be associated with a single member composite ID. A single payer-submitted member record can be associated with only one member composite ID. This approach allows for analysis of claims from a person (rather than member) perspective and a more complete data set to inform enrichment processing such as Clinical Risk Grouping.	BIGINT
Core & Extended Extract	Member_ID	Unique Identifier for member	INTEGER
Core & Extended Extract	Member_Eligible_Flag	This indicates the member was active at the time of the claim date of service (ie: there exists a member eligibility record for that month\year)	CHAR
Core & Extended Extract	Billing_Provider_ID_Mastered	Billing Provider Composite ID is a value created to link payer provider records -within and across data sources (i.e. submissions to the APCD) These links are identified via a matching process that associates common elements belonging to a provider (physician/practice/facility). Several provider records (from disparate sources) may be associated with a single provider composite ID. A single payer-submitted provider record can be associated with only one provider composite ID. Provider Composite IDs can be leveraged for use in claims analysis and in forming a more comprehensive provider directory. The data set may include composite IDs for several provider conditions - including billing, attending or referring.	INTEGER
Core & Extended Extract	Attending_Provider_ID_Mastered	Attending Provider Composite ID is a value created to link payer provider records -within and across data sources (i.e. submissions to the APCD) These links are identified via a matching process that associates common elements belonging to a provider (physician/practice/facility). Several provider records (from disparate sources) may be associated with a single provider composite ID. A single payer-submitted provider record can be associated with only one provider composite ID. Provider Composite IDs can be leveraged for use in claims analysis and in forming a more comprehensive provider directory. The data set may include composite IDs for several provider conditions - including billing, attending or referring.	
Core & Extended Extract	Referring_Provider_ID_Mastered	Referring Provider Composite ID is a value created to link payer provider records -within and across data sources (i.e. submissions to the APCD) These links are identified via a matching process that associates common elements belonging to a provider (physician/practice/facility). Several provider records (from disparate sources) may be associated with a single provider composite ID. A single payer-submitted provider record can be associated with only one provider composite ID. Provider Composite IDs can be leveraged for use in claims analysis and in forming a more comprehensive provider directory. The data set may include composite IDs for several provider conditions - including billing, attending or referring.	

Core & Extended Extract	Claim_Type_Cd	Code to identify claim type. Determines higher level grouping of claims. This is also used in processing to determine what data elements and enrichment is applied. I - Inpatient O - Outpatient P - Professional R - Pharmacy U - Unknown	CHAR
Core & Extended Extract	Payer_Cd	Assigned by CIVHC - Payer Code is a 4-number sequence identifier that corresponds to the payer who is submitting payments.	VARCHAR
Core & Extended Extract	Paid_Dt_Year	Year in CCYY format – part of date claim paid if available, otherwise set to Date Prescription Filled	VARCHAR
Core & Extended Extract	Paid_Dt_Month	Mont in MM format – part of date claim paid if available, otherwise set to Date Prescription Filled	VARCHAR
Core & Extended Extract	Admit_Dt_Year	Year in CCYY format – The date care begins as reported on UB04 field 12.	VARCHAR
Core & Extended Extract	Admit_Dt_Month	Mont in MM format – The date care begins as reported on UB04 field 12.	VARCHAR
Core & Extended Extract	Admit_Time	Time of day for patient admission. Required for all inpatient claims. Time is expressed in military time - HHMM	CHAR
Core & Extended Extract	Admit_Type_Cd	The priority of the visit. Code set as defined by National Uniform Billing Committee	VARCHAR
Core & Extended Extract	Admit_Type_Desc	The description of the Admit_Type_Cd	VARCHAR
Core & Extended Extract	Admit_Source_Cd	The source of the referral for this admission.	VARCHAR
Core & Extended Extract	Admit_Source_Desc	The description of the Admit_Source_Cd	VARCHAR
Core & Extended Extract	Discharge_Time	Time expressed in military time – HHMM	VARCHAR
Core & Extended Extract	Discharge_Status_Cd	Provides a 2-digit identifier of the patient's status at time of discharge	CHAR
Core & Extended Extract	Bill_Type_Cd	The Bill Type field shows a 3-digit number where: 1st digit - Corresponds to the facility where the claim took place 2nd digit - Corresponds to the type of claim (such as "Inpatient," "Outpatient," etc.) 3rd digit - Reflects the frequency of the claim The full explanation for these number combinations can be viewed in the Data Submission Guide, Data Element #MC036	VARCHAR
Core & Extended Extract	Bill_Type_Desc	The description of the Bill_Type_Cd	VARCHAR
Core & Extended Extract	Third_Party_Liability_Cd	Provides a code for Third Party Liability. For further explanation view the Data Submission Guide, Claims Status Data Element #MC038	CHAR
Core & Extended Extract	E_Cd	Describes an injury, poisoning or adverse effect. ICD-9-CM or ICD-10-CM. Do not code decimal point.	VARCHAR
Core & Extended Extract	Service_Start_Dt_Year	Year in CCYY format - Indicates date service began	VARCHAR
Core & Extended Extract	Service_Start_Dt_Month	Month in MM format - Indicates date service began	VARCHAR
Extended Extract	Service_Start_Dt_Day	Day in DD format - Indicates date service began	VARCHAR
Core & Extended Extract	Service_End_Dt_Year	Year in CCYY format - Indicates date service ended	VARCHAR
Core & Extended Extract	Service_End_Dt_Month	Month in MM format - Indicates date service ended	VARCHAR
Extended Extract	Service_End_Dt_Day	Day in DD format - Indicates date service ended	VARCHAR
Core & Extended Extract	Charge_Amt	Provider charged amount. It is preferable that these be presented as line-item charges. UB-04 field 47 As reported in CMS 1500 24F (Prof. Claim Line)	MONEY

Core & Extended Extract	Plan_Paid_Amt	Medical Plan Paid is the portion of the Medical Allowed amount to be paid by the plan. It represents actual dollars that were the plans responsibility. If the Capitated Flag is set = Y, this will portray the Med Prepaid Amount	MONEY
Core & Extended Extract	Prepaid_Amt	For capitated services, the fee-for-service equivalent amount	MONEY
Core & Extended Extract	Copay_Amt	The preset, fixed dollar amount for which the individual is responsible to pay	MONEY
Core & Extended Extract	Coinsurance_Amt	The dollar amount an individual is responsible to pay	MONEY
Core & Extended Extract	Member_Liability_Amt	Portion of Medical Allowed amount to be paid by the member	MONEY
Core & Extended Extract	Deductible_Amt	Amount of member's deductible applied to this service\claim	MONEY
Core & Extended Extract	Discharge_Dt_Year	Year in CCYY format - This represents the date member left the hospital.	VARCHAR
Core & Extended Extract	Discharge_Dt_Month	Month in MM format - This represents the date member left the hospital.	VARCHAR
Core & Extended Extract	Insurance_Product_Type_Cd	The Insurance Product Type Code provides distinct categories for various insurance coverage types. Examples include: 12, 13, 14, 15, 99, HM, MC, MD, SP	VARCHAR
Core & Extended Extract	Insurance_Product_Type_Desc	The description of the Insurance_Product_Type_Cd	VARCHAR
Core & Extended Extract	Allowed_Amt	Total reimbursement amount allowed for services billed on the claim	MONEY
Core & Extended Extract	Line_of_Business_Cd	time of discharge. Line of Business Code ranges from 0-4: 0 - Undefined 1 - Commercial 2 - Medicaid 3 - Medicare 4 - Government	VARCHAR
Core & Extended Extract	Admission_Dx_Cd	Reason for visit Diagnosis code with period removed. UB- 04 field 69	INTEGER
Core & Extended Extract	Principal_Dx_Cd	Unique identifier for the principal diagnosis	INTEGER
Core & Extended Extract	Primary_Proc_Cd	unique identifier for the primary procedure	INTEGER
Core & Extended Extract	Member_Age_Months	Member's age in months if member is less than 1 year old.	INTEGER
Core & Extended Extract	Member_Age_Years	Member's age in years.	SMALLINT
Core & Extended Extract	Length_of_Stay	The duration of a single episode of hospitalization. Shown as a count of days	INTEGER
Core & Extended Extract	ER_Flag	Emergency Room flag. Y/N/U	CHAR
Core & Extended Extract	Line_Count	Count of lines associated with a claim. Each line typically represents a service or billing unit	INTEGER
Core & Extended Extract	COB_Flag	Coordination of Benefits Flag. Indicates if the plan is not the primary payer for this member. Y - Yes, this is a secondary\tertiary payer N - No, this is primary payer	CHAR
Medical Claims Lir Core & Extended			
Extract	Claim_ID	Unique claim identifier	BIGINT
Core & Extended Extract	Claim_Line_No	A unique number identify the line within the claim.	SMALLINT

Core & Extended Extract	Person_ID	Person_ID is a value created to link payer member records -within and across data sources (i.e. submissions to the APCD). These links are identified via a matching process that associates common elements belonging to a person. Several member records (from disparate sources) may be associated with a single member composite ID. A single payer-submitted member record can be associated with only one member composite ID. This approach allows for analysis of claims from a person (rather than member) perspective and a more complete data set to inform enrichment processing such as Clinical Risk Grouping.	INTEGER
Core & Extended Extract	Member_ID	Unique Identifier for member	INTEGER
Core & Extended Extract	network_indicator_code	This field contains a code that indicates whether or not the rendering provider was in or out of the insurer's network.	VARCHAR
Core & Extended Extract	network_indicator_desc	This field contains a description of the reported Network Indicator Code	VARCHAR
Core & Extended Extract	Billing_Provider_ID_Mastered	Billing Provider Composite ID is a value created to link payer provider records -within and across data sources (i.e. submissions to the APCD) These links are identified via a matching process that associates common elements belonging to a provider (physician/practice/facility). Several provider records (from disparate sources) may be associated with a single provider composite ID. A single payer-submitted provider record can be associated with only one provider composite ID. Provider Composite IDs can be leveraged for use in claims analysis and in forming a more comprehensive provider directory. The data set may include composite IDs for several provider conditions - including billing, attending or referring.	INTEGER
Core & Extended Extract	Service_Provider_ID_Mastered	Service_Provider Composite ID is a value created to link payer provider records -within and across data sources (i.e. submissions to the APCD) These links are identified via a matching process that associates common elements belonging to a provider (physician/practice/facility). Several provider records (from disparate sources) may be associated with a single provider composite ID. A single payer-submitted provider record can be associated with only one provider composite ID. Provider Composite IDs can be leveraged for use in claims analysis and in forming a more comprehensive provider directory. The data set may include composite IDs for several provider conditions - including billing, attending or referring.	INTEGER
Core & Extended Extract	Place_of_Service_Cd	A numerical identifier for the location where service was rendered	VARCHAR
Core & Extended Extract	place_of_setting_desc	is field identifies the setting in which the care was rendered (e.g., hospital, swing bed, skilled nursing facility, etc.).	VARCHAR
Core & Extended Extract	type_of_setting_desc	This field provides additional granularity regarding the type of claim (e.g., inpatient, outpatient, provider, lab, etc.).	VARCHAR
Core & Extended Extract	Rev_Cd	Claim line revenue code, only where applicable (facility claims), validated. UB-04 field 42	VARCHAR
Core & Extended Extract	CPT4_Cd	Current Procedural Technology (CPT4) code	VARCHAR
Core & Extended Extract	CPT4_Mod1_Cd	Current Procedural Technology (CPT4) / Healthcare Common Procedure Coding Systems (HCPCS) procedure code modifier As reported in CMS-1500 24D (Prof. Claim Line)	VARCHAR
Core & Extended Extract	CPT4_Mod2_Cd	Provides the Current Procedural Technology (CPT4) Modifier 2 Code associated with procedures on the claim, when applicable. CPT4 modifiers are used to further describe a service or procedure	VARCHAR
Core & Extended Extract	CPT4_Mod3_Cd	Current Procedural Technology (CPT4) / Healthcare Common Procedure Coding Systems (HCPCS) procedure code modifier. As reported in CMS-1500 24D (Prof. Claim Line)	VARCHAR

Core & Extended Extract	CPT4_Mod4_Cd	Current Procedural Technology (CPT4) / Healthcare Common Procedure Coding Systems (HCPCS) procedure code modifier. As reported in CMS-1500 24D (Prof. Claim Line)	VARCHAR
Core & Extended Extract	type_of_service_code	This field contains a code that indicates the type of service, as defined in the CMS Medicare Carrier Manual, for this line item on a noninstitutional claim.	VARCHAR
Core & Extended Extract	type_of_service_desc	This field contains a description of the reported Type of Service Code (Medicare)	VARCHAR
Core & Extended Extract	Service_Start_Dt_Year	Year in YYYY format - Indicates date service began	VARCHAR
Core & Extended Extract	Service_Start_Dt_Month	Month in MM format - Indicates date service began	VARCHAR
Extended Extract	Service_Start_Dt_Day	Day in DD format - Indicates date service began	VARCHAR
Core & Extended Extract	Service_End_Dt_Year	Year in YYYY format - Indicates date service ended	VARCHAR
Core & Extended Extract	Service_End_Dt_Month	Month in MM format - Indicates date service ended	VARCHAR
Extended Extract	Service_End_Dt_Day	Day in DD format - Indicates date service ended	VARCHAR
Core & Extended Extract	Orig_Units	Service Count UB-04 field 46	INTEGER
Core & Extended Extract	Units	Service Count UB-04 field 46 that is adjusted based on CMS Medically Unlikely Edits (MUE)	INTEGER
Core & Extended Extract	Charge_Amt	Provider charged amount. It is preferable that these be presented as line-item charges. UB-04 field 47 As reported in CMS 1500 24F (Prof. Claim Line)	MONEY
Core & Extended Extract	Prepaid_Amt	For capitated services, the fee-for-service equivalent amount	MONEY
Core & Extended Extract	Plan_Paid_Amt	Medical Plan Paid is the portion of the Medical Allowed amount to be paid by the plan. It represents actual dollars that were the plans responsibility. If the Capitated Flag is set = Y, this will portray the Med Prepaid Amount	MONEY
Core & Extended Extract	NDC_Cd	A universal product identifier for prescription drugs for human use.	VARCHAR
Core & Extended Extract	ER_Flag	Emergency Room flag. Y/N/U	VARCHAR
Core & Extended Extract	Copay_Amt	The preset, fixed dollar amount for which the individual is responsible to pay	MONEY
Core & Extended Extract	Coinsurance_Amt	The dollar amount an individual is responsible to pay	MONEY
Core & Extended Extract	Member_Liability_Amt	Portion of Medical Allowed amount to be paid by the member	MONEY
Core & Extended Extract	Deductible_Amt	Amount of member's deductible applied to this service\claim	MONEY
Core & Extended Extract	fee_for_service_equivalent	This field identifies the fee-for-service equivalent that would have been paid by the healthcare claims processor for a specific service if the service had not been capitated or paid under a bundled or managed care withhold payment arrangement.	MONEY
Core & Extended Extract	payment_arrangement_ind_code	This field contains a code that identifies the payment arrangement under which this service line was processed.	CHAR
Core & Extended Extract	payment_arrangement_ind_desc	This field contains a description of the reported Payment Arrangement Indicator Code	VARCHAR
Core & Extended Extract	payment_arrangement_type	This field identifies the type of payment arrangement under which this claim was processed.	VARCHAR
Core & Extended Extract	payment_arrangement_type_desc	This field contains the description for the reported Payment	
Medical Claims D	x		
Core & Extended Extract	Claim_ID	Unique claim identifier	BIGINT
Core & Extended Extract	Seq_Num	Identifies the sequence of line level data pertaining to a claim	

Core & Extended Extract	Dx_Cd	Code value to lookup the patient's ICD code and description.	INTEGER
Core & Extended Extract	icd_version_ind	This field contains a code that identifies the version of ICD used to report this service line.	VARCHAR
Core & Extended Extract	diagnosis_desc	This field contains the description for the reported Diagnosis Code	VARCHAR
Core & Extended Extract Medical Claims IP	POA_Cd	Indicates the diagnosis was present at the time of admission to a facility 1 - Exempt for POA reporting E - Exempt for POA reporting N - Diagnosis was not present at time of inpatient admission U - Documentation insufficient to determine if condition was present at time of inpatient admission W - Clinically undetermined Y - Diagnosis was present at time of inpatient admission	CHAR
Core & Extended			DIONIT
Extract	Claim_ID	Unique claim identifier	BIGINT
Core & Extended Extract	Seq_Num	Identifies the sequence of line level data pertaining to a claim	SMALLINT
Core & Extended Extract	Procedure_Cd	ICD-9 Procedure Code	INTEGER
Core & Extended Extract	Procedure_Dt_Year	Year in YYYY format - date of procedure	VARCHAR
Core & Extended Extract	Procedure_Dt_Month	Month in MM format - date of procedure	VARCHAR
Pharmacy Claims	Header		
Core & Extended Extract	Claim_ID	Unique claim identifier	BIGINT
Core & Extended Extract	Person_ID	Person_ID is a value created to link payer member records -within and across data sources (i.e. submissions to the APCD). These links are identified via a matching process that associates common elements belonging to a person. Several member records (from disparate sources) may be associated with a single member composite ID. A single payer-submitted member record can be associated with only one member composite ID. This approach allows for analysis of claims from a person (rather than member) perspective and a more complete data set to inform enrichment processing such as Clinical Risk Grouping.	INTEGER
Core & Extended Extract	Member_ID	Unique Identifier for member	INTEGER
Core & Extended Extract	Pharmacy_Provider_ID_Mastered	Pharmacy Provider Composite ID is a value created to link payer provider records -within and across data sources (i.e. submissions to the APCD) These links are identified via a matching process that associates common elements belonging to a provider (physician/practice/facility). Several provider records (from disparate sources) may be associated with a single provider composite ID. A single payer-submitted provider record can be associated with only one provider composite ID. Provider Composite IDs can be leveraged for use in claims analysis and in forming a more comprehensive provider directory. The data set may include composite IDs for several provider conditions - including billing, attending or referring.	
Core & Extended Extract	Claim_Type_Cd	Code to identify claim type. Determines higher level grouping of claims. This is also used in processing to determine what data elements and enrichment is applied. I - Inpatient O - Outpatient P - Professional R - Pharmacy U - Unknown	CHAR

Core & Extended Extract	Pharmacy_ID	The provider id of the pharmacy as supplied on the claim. VARCH	
Core & Extended Extract	pharmacy_mail_order_code	This field contains a code that indicates whether or not the dispensing pharmacy was a mail-order pharmacy.	CHAR
Core & Extended Extract	pharmacy_mail_order_desc	This field contains the description for the reported Mail- Order	VARCHAR
Core & Extended Extract	Paid_Dt_Year	Year in CCYY format - date claim paid if available, otherwise set to Date Prescription Filled	VARCHAR
Core & Extended Extract	Paid_Dt_Month	Month in MM format - date claim paid if available, otherwise set to Date Prescription Filled	VARCHAR
Core & Extended Extract	Third_Party_Liability_Cd	Provides a code for Third Party Liability. For further explanation view the Data Submission Guide, Claims Status Data Element #MC038	CHAR
Core & Extended Extract	Copay_Amt	The preset, fixed dollar amount for which the individual is responsible to pay	MONEY
Core & Extended Extract	Coinsurance_Amt	The dollar amount an individual is responsible to pay	MONEY
Core & Extended Extract	Member_Liability_Amt	Portion of Medical Allowed amount to be paid by the member	MONEY
Core & Extended Extract	Deductible_Amt	Amount of member's deductible applied to this service\claim	MONEY
Core & Extended Extract	Plan_Paid_Amt	Medical Plan Paid is the portion of the Medical Allowed amount to be paid by the plan. It represents actual dollars that were the plans responsibility. If the Capitated Flag is set = Y, this will portray the Med Prepaid Amount	MONEY
Core & Extended Extract	Allowed_Amt	Total reimbursement amount allowed for services billed on the claim	MONEY
Core & Extended Extract	Charge_Amt	Provider charged amount. It is preferable that these be presented as line-item charges. UB-04 field 47 As reported in CMS 1500 24F (Prof. Claim Line)	MONEY
Core & Extended Extract	Insurance_Product_Type_Cd	The Insurance Product Type Code provides distinct categories for various insurance coverage types. Examples include: 12, 13, 14, 15, 99, HM, MC, MD, SP	VARCHAR
Core & Extended Extract	Insurance_Product_Type_Desc	The description of the Insurance_Product_Type_Cd	VARCHAR
Core & Extended Extract	First_Filled_Dt_Year	Year in CCYY format - The date care begins as reported on UB04 field 12. This date must be the earliest date reported From Date of Service on CMS 1500 24A. (Prof. Claim hdr)	VARCHAR
Core & Extended Extract	First_Filled_Dt_Month	Month in MM format - The date care begins as reported on UB04 field 12. This date must be the earliest date reported From Date of Service on CMS 1500 24A. (Prof. Claim hdr)	VARCHAR
Extended Extract	First_Filled_Dt_Day	Day in DD format - The date care begins as reported on UB04 field 12. This date must be the earliest date reported From Date of Service on CMS 1500 24A. (Prof. Claim hdr)	VARCHAR
Core & Extended Extract	Last_Filled_Dt_Year	Year in CCYY format - This represents the date member left the hospital. This date must be the latest date reported From Date of Service on CMS 1500 24A. (Prof. Claim hdr)	
Core & Extended Extract	Last_Filled_Dt_Month	Month in MM format - This represents the date member left the hospital. This date must be the latest date reported From Date of Service on CMS 1500 24A. (Prof. Claim hdr)	
Extended Extract	Last_Filled_Dt_Day	Day in DD format - This represents the date member left the hospital. This date must be the latest date reported From Date of Service on CMS 1500 24A. (Prof. Claim hdr)	VARCHAF
Core & Extended Extract	Line_of_Business_Cd	Indicates the Line of Business covering the patient at the time of discharge. Line of Business Code ranges from 0-4: 0 - Undefined 1 - Commercial 2 - Medicaid 3 - Medicare 4 - Government	CHAR

Core & Extended Extract	Member_Age_Years	Member's age in years.	SMALLINT
Core & Extended Extract	Member_Age_Days	Member's age in days.	SMALLINT
Core & Extended Extract	COB_Flag	Coordination of Benefits Flag. Indicates if the plan is not the primary payer for this member. Values are: Y - Yes, this is a secondary\tertiary payer N - No, this is primary payer	CHAR
Core & Extended Extract	Member_Eligible_Flag	This indicates the member was active at the time of the claim date of service (ie: there exists a member eligibility record for that month\year)	CHAR
Pharmacy Claims	Line		
Core & Extended Extract	Claim_ID	Unique claim identifier	BIGINT
Core & Extended Extract	Claim_Line_No	A unique number identify the line within the claim.	SMALLINT
Core & Extended Extract	Person_ID	Person_ID is a value created to link payer member records -within and across data sources (i.e. submissions to the APCD). These links are identified via a matching process that associates common elements belonging to a person. Several member records (from disparate sources) may be associated with a single member composite ID. A single payer-submitted member record can be associated with only one member composite ID. This approach allows for analysis of claims from a person (rather than member) perspective and a more complete data set to inform enrichment processing such as Clinical Risk Grouping.	INTEGER
Core & Extended Extract	Member_ID	Unique Identifier for member	INTEGER
Core & Extended Extract	network_indicator_code	This field contains a code that indicates whether or not the rendering provider was in or out of the insurer's network.	VARCHAR
Core & Extended Extract	network_indicator_desc	This field contains a description of the reported Network Indicator Code	VARCHAR
Core & Extended Extract	NDC_Cd	A universal product identifier for prescription drugs for human use.	VARCHAR
Core & Extended Extract	Drug_Nm	Text name of drug	VARCHAR
Core & Extended Extract	Refill_Ind	Indicates the number of refills allowed.	CHAR
Core & Extended Extract	Generic_Ind	Indicates if generic drug was dispensed	CHAR
Core & Extended Extract	Dispensed_As_Written_Cd	Indicates if substitution of generic was allowed. Values are: Y - Substitution allowed N - Substitution not allowed by subscriber M - Brand drug mandated by law U - Unknown	CHAR
Core & Extended Extract	Compound_Drug_Ind	N - Non-compound drug Y - Compound drug U - Non-specified drug compound	
Core & Extended Extract	Filled_Dt_Year	Year in CCYY format - Indicates date prescription was filled.	VARCHAR
Core & Extended Extract	Filled_Dt_Month	Month in MM format - Indicates date prescription was filled.	VARCHAR
Extended Extract	Filled_Dt_Day	Day in DD format - Indicates date prescription was filled.	VARCHAR
Core & Extended Extract	Quantity	Numeric value of supply dispensed for a prescription drug. May correspond to number of units or volume of medication dispensed.	INTEGER
Core & Extended Extract	Days_Supply	Number of days supply for a prescription drug	INTEGER
Core & Extended Extract	thirty_day_equiv	This field reports the number of thirty-day equivalencies associated with this prescription.	

Core & Extended Extract	Charge_Amt	Provider charged amount. It is preferable that these be presented as line-item charges. UB-04 field 47 As reported in CMS 1500 24F (Prof. Claim Line)	MONEY
Core & Extended Extract	Plan_Paid_Amt	Medical Plan Paid is the portion of the Medical Allowed amount to be paid by the plan. It represents actual dollars that were the plans responsibility. If the Capitated Flag is set = Y, this will portray the Med Prepaid Amount	MONEY
Core & Extended Extract	Ingredient_Cost_Amt	Portion of Rx charges which are attributed to the cost of the product.	MONEY
Core & Extended Extract	Dispensing_Fee_Amt	Total dollars pertaining to prescription drug dispensing fees	MONEY
Core & Extended Extract	Copay_Amt	The preset, fixed dollar amount for which the individual is responsible to pay	MONEY
Core & Extended Extract	Coinsurance_Amt	The dollar amount an individual is responsible to pay	MONEY
Core & Extended Extract	Member_Liability_Amt	Portion of Medical Allowed amount to be paid by the member	MONEY
Core & Extended Extract	Deductible_Amt	Amount of member's deductible applied to this service\claim	MONEY
Member Eligibility Core & Extended			
Extract	Member_ID	Unique Identifier for member	INTEGER
Core & Extended Extract	Eligibile_Period_Dt_Year	Year in CCYY format - Date eligibility begins for a period of time. For monthly recording this will be the first date of the month if a member has eligibility.	VARCHAR
Core & Extended Extract	Eligibile_Period_Dt_Month	Month in MM format - Date eligibility begins for a period of time. For monthly recording this will be the first date of the month if a member has eligibility.	VARCHAR
Core & Extended Extract	Eligibile_Period_Dt_Day	Day in DD format - Date eligibility begins for a period of time. For monthly recording this will be the first date of the month if a member has eligibility.	VARCHAR
Core & Extended Extract	Plan_Effective_Dt_Year	Year in CCYY format - Date eligibility started for this member under this plan type. The purpose of this data element is to maintain eligibility span for each member.	VARCHAR
Core & Extended Extract	Plan_Effective_Dt_Month	Month in MM format - Date eligibility started for this member under this plan type. The purpose of this data element is to maintain eligibility span for each member.	VARCHAR
Core & Extended Extract	Plan_Effective_Dt_Day	Day in DD format - Date eligibility started for this member under this plan type. The purpose of this data element is to maintain eligibility span for each member.	VARCHAR
Core & Extended Extract	Insurance_Product_Type_Cd	The Insurance Product Type Code provides distinct categories for various insurance coverage types. Examples include: 12, 13, 14, 15, 99, HM, MC, MD, SP	VARCHAR
Core & Extended Extract	Insurance_Product_Type_Desc	The description of the Insurance_Product_Type_Cd	VARCHAR
Core & Extended Extract	Line_of_Business_Cd	Line of Business code	VARCHAR
Core & Extended Extract	Line_of_Business_Cd_Desc	The description of the Line_of_Business_Cd	VARCHAR
Core & Extended Extract	Plan_ID	CMS National Plan ID or NAIC	VARCHAR
Core & Extended Extract	Coverage_Level_Cd	Benefit coverage level. Indicates if insurance coverage is for a family, individual, employee, etc.	VARCHAR
Core & Extended Extract	Medical_Coverage_Flag	Yes, No	VARCHAR
Core & Extended Extract	Prescription_Drug_Coverage_Fla	Indicates if member eligibility includes prescription drug coverage. Y - Yes N - No U - Unknown	VARCHAR

Member to Person	Crecovalle		
Extended Extract	Member_Zip_Cd	The member's zip code. As reported on CMS-1500 5 (Prof. Claim hdr)	VARCHAR
Core & Extended Extract	Member_Zip_Cd_3_Digit	The first 3 digits of the member's zip code. As reported on CMS-1500 5 (Prof. Claim hdr)	
Core & Extended Extract	Date of Death	This field identifies the reported month and year of the member's death.	
Core & Extended Extract	Other_Ethnicity	List ethnicity if MC025 or MC026 are coded as OTHER.	VARCHAR
Core & Extended Extract	Ethnicity_2_Cd	See code set for ME025.	VARCHAR
Core & Extended Extract	Ethnicity_1_Cd	Code that identifies ethnicity. See code set for ME025	VARCHAR
Core & Extended Extract	Hispanic_Ind	Indicates if member or person is of Hispanic descent. Y/N/U	CHAR
Core & Extended Extract	Other_Race	Located on member eligibility, columns referred to are: ME021 & ME022	VARCHAR
Core & Extended Extract	Race_2_Desc	Description for Race_2_Cd	VARCHAR
Core & Extended Extract	Race_2_Cd	See code set for ME021.	VARCHAR
Core & Extended Extract	Race_1_Desc	Description for Race_1_Cd	VARCHAR
Core & Extended Extract	Race_1_Cd	Code to identify race. See code set for ME021	VARCHAR
Core & Extended Extract	Member_State_Cd	Indicates the Member's State of residence. Uses postal service standard 2 letter abbreviations	CHAR
Core & Extended Extract	Member_City_Nm	Member's City Name of Residence	VARCHAR
Core & Extended Extract	Payer_Cd	Assigned by CIVHC Payer Code is a 4-number sequence identifier that corresponds to the payer who is submitting payments.	VARCHAR
Core & Extended Extract	Member_ID	Unique Identifier for member	INTEGER
Extract Member		Exchange Metallic Tier Code	
Core & Extended	exchange_metallic_tier_desc	This field contains the description for the reported	VARCHAR
Core & Extended Extract	exchange_metallic_tier_code	This field contains a code that indicates the level of the member's Exchange product.	VARCHAR
Core & Extended Extract	exchange_market_type_code_des c	This field contains the description for the reported Exchange Market Type Code	VARCHAR
Core & Extended Extract	exchange_market_type_code	This field contains a code that indicates the type of policy sold by the insurer through the Exchange.	VARCHAR
Core & Extended Extract	purchased_through_exchange	This field indicate whether or not the member's product was purchased through the Rhode Island Health Benefits Exchange.	VARCHAR
Core & Extended Extract	medicaid_program_code_desc	This field contains the description for the reported Medicaid Program Code	VARCHAR
Core & Extended Extract	medicaid_program_code	This field contains a code that indicates the Medicaid program in which the member was enrolled for the reported coverage period.	VARCHAR
Core & Extended Extract	aid_category_desc	This field contains the description for the reported Aid Category Code	VARCHAR
Core & Extended Extract	aid_category_code	This field contains a code that indicates the member's Medicaid aid category based on service date.	VARCHAR
Core & Extended Extract	Coverage_Type_Cd	Specifies the individuals covered: I - Individual F - Family 2 - 2 person	VARCHAR
Core & Extended Extract	Primary_Insurance_Ind	Y – Yes, primary insurance N – No, secondary or tertiary insurance U - Unknown	VARCHAR

Core & Extended Extract	Member_ID	Unique Identifier for member	BIGINT	
Core & Extended Extract	Person_ID	Person_ID is a value created to link payer member records -within and across data sources (i.e. submissions to the APCD). These links are identified via a matching process that associates common elements belonging to a person. Several member records (from disparate sources) may be associated with a single member composite ID. A single payer-submitted member record can be associated with only one member composite ID. This approach allows for analysis of claims from a person (rather than member) perspective and a more complete data set to inform enrichment processing such as Clinical Risk Grouping.	BIGINT	
Core & Extended Extract	Effective_Date	Effective date of when the Member_ID to Member_Composite_ID relationship was established	DATE	
Person				
Core & Extended Extract	Person_ID	Peron_ID is a value created to link payer member records -within and across data sources (i.e. submissions to the APCD). These links are identified via a matching process that associates common elements belonging to a person. Several member records (from disparate sources) may be associated with a single member composite ID. A single payer-submitted member record can be associated with only one member composite ID. This approach allows for analysis of claims from a person (rather than member) perspective and a more complete data set to inform enrichment processing such as Clinical Risk Grouping.	BIGINT	
Core & Extended Extract	Gender_Cd	This column identifies the gender of the patient as reported in UB04 Field 11 or from membership.		
Core & Extended Extract	Member_State_Cd	Indicates the Member's State of residence. Uses postal service standard 2 letter abbreviations CHAR		
Core & Extended Extract	Member_Zip_Cd_3_Digit	The first 3 digits of the member's zip code. As reported on CMS-1500 5 (Prof. Claim hdr)		
Extended Extract	Member_Zip_Cd	The member's zip code. As reported on CMS-1500 5 (Prof. Claim hdr)		
Core & Extended Extract	Race_1_Cd	Code to identify race. See code set for ME021	VARCHAR	
Core & Extended Extract	Race_2_Cd	See code set for ME021.	VARCHAR	
Core & Extended Extract	Other_Race	Located on member eligibility, columns referred to are: ME021 & ME022	VARCHAR	
Core & Extended Extract	Hispanic_Ind	Indicates if member or person is of Hispanic descent. Y/N/U	CHAR	
Core & Extended Extract	Ethnicity_1_Cd	Code that identifies ethnicity. See code set for ME025	VARCHAR	
Core & Extended Extract	Ethnicity_2_Cd	See code set for ME025.	VARCHAR	
Core & Extended Extract	Other_Ethnicity	List ethnicity if MC025 or MC026 are coded as OTHER.	VARCHAR	
Core & Extended Extract	exchange_product_id	This field identifies the member's type of insurance or insurance product provided through the Exchange.	VARCHAR	
Provider Composite	ė			
Core & Extended Extract	Provider_ID_Mastered	Provider Composite ID is a value created to link payer provider records -within and across data sources (i.e. submissions to the APCD) These links are identified via a matching process that associates common elements belonging to a provider (physician/practice/facility). Several provider records (from disparate sources) may be associated with a single provider composite ID. All Mastered Provider IDs, regardless if field name in the claims files, join to this data element for access to provider detail.	INTEGER	

Core & Extended Extract	Provider_Type	ORG - A Facility/Provider Group/Organization (Non- Person) IND - Individual Provider (Person) UK - Unknown	VARCHAR
Core & Extended Extract	NPI	National Provider Id assigned by CMS (Hospital ID number). Requires registration to the National Plan and Provider Enumeration System (NPPES)	VARCHAR
Core & Extended Extract	Last_Name	Provider's last name	VARCHAR
Core & Extended Extract	First_Name	Provider's first name	VARCHAR
Core & Extended Extract	Name_Suffix	Provider's name suffix	CHAR
Core & Extended Extract	First_Initial	The provider's First initial	VARCHAR
Core & Extended Extract	Middle_Initial	The provider's middle initial	VARCHAR
Core & Extended Extract	Credential_Text_1	ex: MD, DMD, DO etc.	VARCHAR
Core & Extended Extract	Organization_Name	Provides the organization name corresponding to the provider	VARCHAR
Core & Extended Extract	Organization_Other_Name	Other organization name corresponding to the provider	VARCHAR
Core & Extended Extract	Organization_Name_Clean	Organization Name without punctuation or symbols	VARCHAR
Core & Extended Extract	Medicare_Provider_Id	Medicare Provider Identification. ID used by provider for billing to Medicare (CMS)	INTEGER
Core & Extended Extract	Primary_Address_ID	Provider Address identification number (Used to link to Provider Composite Address table)	INTEGER
Provider to Addre	ss Crosswalk		
Core & Extended Extract	Provider_ID_Mastered	Provider Composite ID is a value created to link payer provider records -within and across data sources (i.e. submissions to the APCD) These links are identified via a matching process that associates common elements belonging to a provider (physician/practice/facility). Several provider records (from disparate sources) may be associated with a single provider composite ID. All Mastered Provider IDs, regardless if field name in the claims files, join to this data element for access to provider detail.	BIGINT
Core & Extended Extract	Provider_Address_ID_Mastered	Provider identification number for composite address data.	BIGINT
Provider Compos	ite Address		
Core & Extended Extract	Provider_Address_ID_Mastered	Provider Address identification number	INTEGER
Core & Extended Extract	Zip_Cd_3_Digit	The first 3 digits of the zip code	VARCHAR
Core & Extended Extract	Zip_Cd	Zip code	CHAR
Core & Extended Extract	State	State_Cd abbreviation code.	CHAR
Core & Extended Extract	City	Provider's City	VARCHAR
Core & Extended Extract	Address_Type_Cd	Code indicating what type the provider address is L = Assumed Practice Location U = Unknown M = Mailing Location (P.O. Box)	

APPENDIX 5: CTC METHODOLOGIES

Care Transformation Collaborative

Attribution Scheme for Program Evaluation

One attribution scheme will be used to assign a primary care provider (PCP) to each member, regardless of the insurance plan of the member.

Attribution will be done on a monthly basis. If an assigned PCP is provided for the member for the first of the month, the member will be attributed to that PCP for the month.

If there is no assigned PCP, the attributed PCP will be derived by looking back 27 months from the first day of the month to find all eligible visits. In order to be eligible, a visit must (1) be in the outpatient or professional services files, (2) have a CPT code listed in Table 1, and (3) be with a PCP whose specialty is listed in Table 1.

Table 1. Codes

CPT-4 Codes to Identify Eligible Visits

Evaluation and Management - Office or Other Outpatient Services

- New Patient: 99201-99205
- Established Patient: 99211-99215

Domiciliary or Rest Home Care

- New Patient: 99321–99328
- Established Patient: 99331–99337

Home Visit

- New Patient: 99341–99345
- Established Patient: 99347–99350

Preventive Medicine Services

- New Patient: 99381–99387 *
- Established Patient: 99391–99397 *

Annual Wellness Visit

- Welcome to Medicare visit: G0402
- Initial: G0438 *
- Subsequent: G0439 *

Specialties for PCPs

Family practice, internal medicine, nurse practitioner (practicing with PCP), physician's assistant (practicing with PCP), pediatrics, or geriatrics.

The PCP for the most recent preventive visit (CPT codes marked with a *) during the 27 months is attributed to the member for that month.

If there are no preventive visits, the PCP with the most eligible visits during the previous 27 months is attributed to the member for that month. (If there are multiple visits on the same day for the same provider, count as one visit). If multiple PCPs have the same number of

eligible visits, use the PCP (of those tied with the most eligible visits) seen latest during the 27 months. If more than one of those PCPs were seen on the most recent visit, the member is attributed to the one with the previous most recent eligible visit.

If there are no eligible visits in the 27 months prior to the first day of the month, the member is unattributed.

For example, to attribute a PCP for April 2010 first determine if the data includes an assigned PCP for April 1, 2010. If it does, attribute the member to that PCP. If not, look at all claims for eligible visits between January 1, 2008 and March 31, 2010. Attribute the member to the PCP who had the most recent visit with a CPT code of 99381–99387, 99391–99397, G0438 or G0439. If there were no visits with these CPT codes in the 27 months, attribute the member to the PCP who had the most eligible visits between January 1, 2008 and March 31, 2010. If there was a tie between PCPs, attribute to the PCP seen most recently in the period January 1, 2008 through March 31, 2010. If there is still a tie, attribute to the one who has the two most recent eligible visits. If there were no eligible visits between January 1, 2008 and March 31, 2010 then the member is unattributed.

Attribution Exclusions

There are two exceptions to the attribution scheme.

- (1) If the practice the member is attributed to changes (including changing sites within the same practice) and there is either an ED visit (fitting the all-cause measure), an observation stay or an inpatient stay (fitting either the criteria of the all-cause measure or readmission measure) in the 30 days following the change, the member becomes unattributed for the first 30 days they had been attributed to the new practice. (Note: This 30-day grace period does <u>not</u> apply to the initial practice the member is attributed to due to left-censoring of the data.)
 - For example, take a member who is attributed to Provider X at practice 7 from January 1, 2010 to March 3, 2011 and Provider Y at practice 12 from March 4, 2011 to December 31, 2012. There is an ED visit (fitting the criteria of the all-cause measure) for that member on March 15, 2011. Since the ED visit falls in the first 30 days the member is attributed to Provider Y, change the attribution for March 4, 2011 to April 2, 2011 to "unattributed." The member is still attributed to Provider Y for the period April 3, 2011 to December 31, 2012.
- (2) If the member has a gap in coverage for 32 days or longer during the preceding 12 months, the member becomes unattributed until there is no longer a gap of more than 31 days in the preceding 12 months. For example, if a member has coverage from January 1, 2007 to June 30, 2009 and August 15, 2009 to December 31, 2011 then the member would be unattributed from August 2, 2009 to July 14, 2010. (Note: The "preceding 12 months" does <u>not</u> include time before the member's first date of coverage. For example, if a member starts coverage on March 1, 2009 and has an eligible visit to a PCP on March 15, 2009 they are able to be attributed as of March 16, 2009 even though there is a gap of 11 ½ months before March 16, 2009.)

Practice Attribution

The practice the attributed PCP belonged to on the date of the attributing event (and not the attribution date) is used to assign whether the member was a CTC, non-CTC PCMH or comparison group. For example, a member is attributed for December 2013 to Provider Z based on a preventive visit with Provider Z on March 15, 2012. Provider Z practiced at CTC practice 25 from January 1, 2009 through March 31, 2012 before moving to their current practice (45, a non-CTC, non-PCMH practice) on April 1, 2012. The member is attributed for December 2013 to practice 25 because the provider was practicing there when the visit occurred (March 15, 2012) even though the provider is practicing at practice 45 in December 2013.



Measure Specification:

Hospital Admissions: All Cause, Surgical and Medical

Measure Set ID	#4	Version Number	7
Version Effective Date	August 27, 2014	Date Endorsed	
Care Setting	Hospital	Unit of Measurement	1,000 member months
Measurement Duration	Quarterly	Measurement Period	January 1, 2012 – December 31, 2014
Measure Type	Outcome	Measure Scoring	Rate/1,000 member months
Payer source	Commercial claims initially	Improvement notation	Higher rates indicate poorer quality
Origin of Measure	Beacon-CSI Modifications done in ac	ecordance with the Beacon-CSI w	orking group consensus.
Measure description	Number of acute-care hospital admissions per 1,000 member months, excluding any admissions for pregnancy, mental health, or chemical dependency services in adults ages 18 years and older.		
References	https://www.bluecrossma.com/staticcontent/npi_docs/UB_04FormLocator Appendices.pdf Beacon-CSI-RI Phase 1 Utilization and Cost Metrics—Proposed Health Plan Reporting Specifications		

V2: Clarified that exclusion for mental health purposes or the visit is related to chemical dependency is based upon principal diagnosis. Added exclusion for dental-related visits.

V3: Removed text "except where the end date of coverage in the quarter is the date of death" for denominator exclusions.

Release Notes/ Summary of Changes

V4: Changed to including all patients with at least one day of coverage in the denominator instead of only including patients covered for the full quarter. Clarified that the denominator includes "all RI residents and non-RI residents attributed to an RI provider." Removed denominator exclusion "Exclude patients who are attributed to out-of-state providers." Added "Weight admissions by the number of days covered / number of days in the quarter" to the numerator details.

V5: Removed restriction of "adults ages 18 years and older" since children will now be included in the rates. Removed "weighted by the number of days covered / number of days in the quarter" from the numerator details. Extended measurement period. Removed restriction of "Include admissions to acute care hospitals only. (See Technical Notes document for list of included hospitals). Exclude admissions to specialty hospitals, mental health hospitals, rehabilitation facilities, and skilled nursing facilities" from the numerator details.

V6: Added split between Surgical and Medical admissions based on DRG code.

V7: Added acute-care hospital restriction.

Technical Specifications		
Target Population	Members with an acute-care hospital admission.	
Denominator		
Denominator Statement	1,000 member months	
Denominator Details	Include all RI residents and non-RI residents attributed to an RI provider who were covered for at least one day, weighted by the number of days covered / number of days in the quarter.	
Denominator Exceptions and Exclusions	Exclude patients if not covered at any time during the quarter.	
Denominator Exceptions Details	None	
Numerator		
Numerator Statement	 All Cause: Number of acute-care hospital admissions, excluding any admissions for pregnancy, dental health, mental health, or chemical dependency services. Medical: Number of acute-care hospital admissions for medical reasons. Surgical: Number of acute-care hospital admissions for surgical reasons. 	
Numerator Details	Count transfers or embedded stays from an acute care hospitals to other	

facilities as one admission. Use the principal diagnosis and revenue codes from the first admission for exclusion purposes.

Include only admissions to acute-care hospitals (place of service=21).

Exclude admissions where the principal diagnosis is any of the following pregnancy-related ICD-9 codes:

- Complications of Pregnancy, Childbirth, and the Puerperium (630.xx–
- Newborn (Perinatal) Guidelines (760.xx–779.xx)
- V20.xx Health supervision of infant or child
- V22.xx Normal pregnancy
- V23.xx Supervision of high-risk pregnancy
- V24.xx Postpartum care and evaluation
- V27.xx Outcome of delivery
- V28.xx Antenatal screening
- V29.xx Observation and evaluation of newborns for suspected condition not found
- V30.xx–V39.xx Liveborn infant according to type of birth

Exclude admissions where the principal diagnosis is for mental health purposes or the visit is related to chemical dependency, as defined by

- CPT codes 90801–90899¹
- principal ICD-9-CM diagnosis codes 290.xx-316.xx
- ICD-9-CM procedure code 94.26, 94.27 or 94.6²
- principal ICD-9-CM diagnosis codes 960.xx-979.xx with secondary ICD-9-CM diagnosis codes 291.xx-292.xx or 303.xx-305.xx

Exclude visits where the principal diagnosis is dental related (ICD-9 codes $520.xx-525.xx)^3$.

Exclude interim billing codes 112, 113, 114, 122, 123, 124.

Exclude admissions with UB revenue codes 0112, 0114, 0116, 0122, 0124, 0126, 0132, 0134, 0136, 0142, 0144, 0146, 0152, 0154, 0156, 0170–0179, 0720-0729.4

If the DRG code is one of the following: 052-103

121-125

¹ These exclusions need to be reviewed or revisited. Beacon-CSI does not have them. These include outpatient and inpatient psychotherapy (which can be associated with admissions outside of mental health and chemical dependency); it also includes 90862, which is pharmacologic mgmt.

² Specifications for Beacon-CSI use do not have these exclusions (94.26 and 94.27 for electroshock treatment; 94.6 alcohol and drug rehab/detox).

³ Specifications for Beacon-CSI use do not have these exclusions.

⁴ Specifications for Beacon-CSI use specifies UB bill types to include (11x, 12x, 41x) instead of listing UB bill types to exclude. End result is slightly different.

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146-159
175-208
280-316
368-395
432-446
533-566
592-607
637-645
682-700
722-730
754-761
774-782
789-795
808-816
834-849
862-872
880-887
894-897
913-923
933-935
945-951
963-965
974-977 include in the medical admissions measure.
If the DRG code is one of the following:
001-013
020-042
113-117
129-139
163-168
215-265
326-358
405-425
453-517
573-585
614-630
652-675
707-718
734-750
765-770
799-804
820-830
853-858
876
901-909
927-929
939-941
955-969
970
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981-989 include in the surgical admissions measure.

Include all DRGs in the All Cause admissions measure.

Risk Adjustment
Risk adjustment strategy to be determined and incorporated into Round 2.

Sampling
No sampling; patients assigned to practices according to the Beacon-CSI attribution methodology.



Measure Specification: Emergency Department Visits: All Cause

Measure Set ID	#1	Version Number	5
Version Effective Date	September 1, 2013	Date Endorsed	
Care Setting	Emergency Department	Unit of Measurement	1,000 member months
Measurement Duration	Quarterly	Measurement Period	January 1, 2012 – December 31, 2014
Measure Type	Outcome	Measure Scoring	Rate/1,000 member months
Payer source	Commercial claims initially	Improvement notation	Higher rates indicate poorer quality
Origin of Measure	Effectiveness Data and Informational Committee for Qua	ality Assurance (NCQA). HEDI rmation Set. Vol. 1, narrative. Vality Assurance (NCQA); 2010.	Vashington (DC): Various pages.
Measure description	The number of ED visits per 1,000 member months, excluding visits that lead to admissions or observation stays and any visits for pregnancy, mental health, or chemical dependency services.		
References	National Committee for Quality Assurance (NCQA). HEDIS® 2011: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2010. Various pages. RAND working paper: "Developing an Efficiency Measurement Approach to Assess Hospital Readmissions, Ambulatory Care Sensitive Admissions, and Preventable Emergency Department Visits: A Resource Guide for Beacon Communities and Other Community Collaboratives." http://qualitymeasures.ahrq.gov/content.aspx?id=34130&search=emergency+department https://www.bluecrossma.com/staticcontent/npi_docs/UB_04FormLocatorAppendices.pdf Coffey RM, Barrett ML, Steiner S. Final Report Observation Status Related to Hospital Records. 2002. HCUP Methods Series Report #2002-3. ONLINE September 27, 2002. Agency for Healthcare Research and Quality. Available: http://www.hcup-us.ahrq.gov .		

	V2: Clarified that exclusion for mental health purposes or the visit is related to chemical dependency is based upon principal diagnosis. Added exclusion for dental related visits.
	V3: Removed text "except where the end date of coverage in the quarter is the date of death" for denominator exclusions.
Release Notes/ Summary of Changes	V4: Changed to including all patients with at least one day of coverage in the denominator instead of only including patients covered for the full quarter. Clarified that the denominator includes "all RI residents and non-RI residents attributed to an RI provider." Removed denominator exclusion "Exclude patients who are attributed to out-of-state providers." Added "weighted by the number of days covered / number of days in the quarter" to the numerator details.
	V5: Removed restriction of "adults ages 18 years and older" since children will now be included in the rates. Removed "weighted by the number of days covered / number of days in the quarter" from the numerator details. Extended measurement period.

Technical Specifications					
Target Population	Members with an ED visit.				
Denominator	Denominator				
Denominator Statement	1,000 member months.				
Denominator Details	Include all RI residents and non-RI residents attributed to an RI provider who were covered for at least one day, weighted by the number of days covered / number of days in the quarter.				
Denominator Exceptions and Exclusions	Exclude patients if not covered at any time during the quarter.				
Denominator Exceptions Details	l None				
Numerator					
Numerator Statement	The number of ED visits, excluding visits that lead to admissions or observation stays and any visits for pregnancy, dental health, mental health, or chemical dependency services.				
Numerator Details	Count each ED visit not leading to an admission or observation stay as one visit. Multiple visits on same date count as only one visit. ED visits are identified by at least one of the following ¹ :				

¹ Specifications for Beacon-CSI use has items grouped differently (The codes are there, but the grouping may make a difference):

[•] CPT codes 99281–99285 and POS = 23

[•] CPT codes 10040–69979 and POS = 23

- CPT codes 99281–99285 with UB revenue codes 045x, 0981
- CPT codes 10040–69979 with POS 23.
- HCPCS codes G0380–G0385.²

Exclude ED visits occurring on the same day as an admission or the day before an admission.³

Exclude ED visits occurring on the same day as an observation stay or the day before an observation stay. 4 Observational stays are identified as

- UB revenue code 0760 (general classification category) or 0762 (observation room); and
- HCPCS code G0378 (hospital observation service, per hour) or G0379 (direct admission of patient for hospital observation care).⁵

Exclude visits where the principal diagnosis is any of the following pregnancy related ICD-9 codes⁶:

- Complications of Pregnancy, Childbirth, and the Puerperium (630.xx–679.xx)
- Newborn (Perinatal) Guidelines (760.xx–779.xx)
- V20.xx Health supervision of infant or child
- V22.xx Normal pregnancy
- V23.xx Supervision of high-risk pregnancy
- V24.xx Postpartum care and evaluation
- V27.xx Outcome of delivery
- V28.xx Antenatal screening
- V29.xx Observation and evaluation of newborns for suspected condition not found
- V30.xx–V39.xx Liveborn infant according to type of birth

Exclude visits where the principal diagnosis is for mental health purposes or the visit is related to chemical dependency, as defined by⁷

- CPT codes 90801–90899
- principal ICD-9-CM diagnosis codes 290.xx-326.xx
- ICD-9-CM procedure code 94.26, 94.27, or 94.6
- UB rev codes 0450, 0451, 0452, 0459, 0981 and POS = 23

² These are not included in the specifications for Beacon-CSI use.

³ Specifications for Beacon-CSI use are inconsistent on this point. In one place it indicates same day or day before, but in another place it says just the same day. Same goes for observation stay.

⁴ Specifications for Beacon-CSI use define observation stays as revenue codes of 760, 761, 762, 769. Specifications for Beacon-CSI use also indicates, "Exclude claims with a day bed code" with no specific codes listed.

⁵ We currently are not counting revenue codes 0761 and 0769 as observation stays because they may be treatment rooms and not true observation stays. Claims with CPT codes 99217–99220 are also not counted as observation stays.

⁶ Specifications for Beacon-CSI use do not have these exclusions.

⁷ Specifications for Beacon-CSI use do not have these exclusions.

• principal ICD-9-CM diagnosis codes 960.xx–979.xx with secondary ICD-9-CM diagnosis codes 291.xx–292.xx or 303.xx–305.xx.

Exclude visits where the principal diagnosis is dental related (ICD-9 codes 520.xx-525.xx). 8

Risk Adjustment

Risk adjustment strategy to be determined and incorporated into Round 2.

Sampling

No sampling; patients assigned to practices according to the Beacon-CSI attribution methodology.

⁸ Specifications for Beacon-CSI use do not have these exclusions.



Measure Specification:

Hospital Admissions: ACSC

Measure Set ID	#5	Version Number	4	
Version Effective Date	August 27, 2014	Date Endorsed		
Care Setting	Hospital	Unit of Measurement	1,000 member months	
Measurement Duration	Quarterly	Measurement Period	January 1, 2012 – December 31, 2014	
Measure Type	Outcome	Measure Scoring	Rate/1,000 member months	
Payer source	Commercial claims initially Improvement notation Higher rates indicate poorer quality			
Origin of Measure	Beacon-CSI Modifications done in accordance with the Beacon-CSI working group consensus.			
Measure description	Number of acute-care hospital admissions per 1,000 member months with a principal diagnosis included in the overall PQI composite of ambulatory care sensitive conditions (ACSC) in adults ages 18 years and older.			
References	Finegan MS, Gao J, Pasquale D, Campbell J. Trends and geographic variation of potentially avoidable hospitalizations in the veterans health-care system. Health Serv Manage Res. 2010;23(2):66–75. AHRQ Quality Indicators—Guide to Prevention Quality Indicators: Hospital Admission for Ambulatory Care Sensitive Conditions. Rockville, MD: Agency for Healthcare Research and Quality. Revision 4. (November 24, 2004). AHRQ Pub. No. 02-R0203. http://www.qualityindicators.ahrq.gov/Downloads/Software/SAS/V43/Composite-User_Technical_Specification_PQI_4.3.pdf			

V2: Changed to including all patients with at least one day of coverage in the
denominator instead of only including patients covered for the full quarter. Clarified
that the denominator includes "all RI residents and non-RI residents attributed to an
RI provider." Removed denominator exclusion "Exclude patients who are attributed
to out-of-state providers." Added "Weight admissions by the number of days
covered / number of days in the quarter" to the numerator details.

Release Notes/ Summary of Changes

V3: Removed restriction of "adults ages 18 years and older" since children will now be included in the rates. Removed "weighted by the number of days covered / number of days in the quarter" from the numerator details. Extended measurement period. Remove restriction "Include admissions to acute care hospitals only. (See Technical Notes document for list of included hospitals). Exclude admissions to specialty hospitals, mental health hospitals, rehabilitation facilities, and skilled nursing facilities" from the numerator details.

V4: Added acute-care hospital restriction.

Technical Specifications				
Target Population	Members with an acute-care hospital admission with a principal diagnosis included in the overall PQI composite of ambulatory care sensitive conditions (ACSC).			
Denominator				
Denominator Statement	1,000 member months.			
Denominator Details Include all RI residents and non-RI residents attributed to an RI provious were covered for at least one day, weighted by the number of days on number of days in the quarter.				
Denominator Exceptions and Exclusions	Exclude patients if not covered at any time during the quarter.			
Denominator Exceptions Details	None			
Numerator				
Numerator Statement	Number of acute-care hospital admissions with a principal diagnosis included in the overall PQI composite of ambulatory care sensitive conditions (ACSC).			
	Count transfers or embedded stays from an acute care hospitals to other facilities as one admission. Use the principal diagnosis and revenue codes from the first admission for exclusion purposes. Include only admissions to acute-care hospitals (place of service=21).			
Numerator Details	Include admissions with any of the following conditions. Lists of procedure and diagnosis codes can be found in "Specs ACSC diagnosis codes.doc":			
	 Principal diagnosis of diabetes short-term complication 			
	 Principal diagnosis of diabetes long-term complication 			
	 Principal diagnosis of chronic obstructive pulmonary disease or asthma in adults 40 years or older 			
	Secondary diagnosis of chronic obstructive pulmonary disease in adults			

40 years or older and a principal diagnosis of bronchitis (ICD-9 code 466.0 or 490)

- Principal diagnosis of hypertension, excluding admissions with either
 - o a cardiac procedure code or
 - any diagnosis of Stage I–IV kidney disease accompanied by procedure code for preparation for hemodialysis (dialysis access procedures)
- Principal diagnosis of heart failure, excluding admissions with a cardiac procedure code
- Principal diagnosis of dehydration, excluding admissions with any diagnosis of chronic renal failure
- Secondary diagnosis of dehydration and principal diagnosis of "hyperosmolality and/or hypernatremia," gastroenteritis, or acute kidney injury, excluding admissions with any diagnosis of chronic renal failure
- Principal diagnosis of bacterial pneumonia, excluding admissions with either
 - o any diagnosis of sickle cell anemia or HB-S disease or
 - o any diagnosis or procedure code for immunocompromised state
- Principal diagnosis of urinary tract infection, excluding admissions with either
 - o any diagnosis of kidney/urinary tract disorder or
 - o any diagnosis or procedure code for immunocompromised state
- Principal diagnosis of angina, excluding admissions with a cardiac procedure code
- Principal diagnosis of uncontrolled diabetes
- Principal diagnosis of asthma in adults ages 18–39, excluding admissions with any diagnosis code of cystic fibrosis and anomalies of the respiratory system
- Any diagnosis of diabetes and a procedure code for a lower-extremity amputation, excluding admissions with either
 - o DRG 765-782 (pregnancy, childbirth, and puerperium) or
 - o Diagnosis for any traumatic amputation of the lower extremity

Exclude interim billing codes 112, 113, 114, 122, 123, 124.

Exclude admissions with UB revenue codes 0112, 0114, 0116, 0122, 0124, 0126, 0132, 0134, 0136, 0142, 0144, 0146, 0152, 0154, 0156, 0170–0179, 0720–0729.

¹ Specifications for Beacon-CSI use specifies UB bill types to include (11x, 12x, 41x) instead of listing UB bill types to exclude. End result is slightly different.

Risk Adjustment

Risk adjustment strategy to be determined and incorporated into Round 2.

Sampling

No sampling; patients assigned to practices according to the Beacon-CSI attribution methodology.



Diagnosis and Procedure Codes for Ambulatory Care Sensitive Conditions (ACSCs)

ICD-9-CM Diabetes short-term complications diagnosis codes:

250.10	DMII KETO NT ST UNCNTRLD	250.22	DMII HPROSMLR UNCONTROLD
250.11	DMI KETO NT ST UNCNTRLD	250.23	DMI HPROSMLR UNCONTROLD
250.12	DMII KETOACD UNCONTROLD	250.30	DMII O CM NT ST UNCNTRLD
250.13	DMI KETOACD UNCONTROLD	250.31	DMI O CM NT ST UNCNTRLD
250.20	DMII HPRSM NT ST UNCNTRL	250.32	DMII OTH COMA UNCONTROLD
250.21	DMI HPRSM NT ST UNCNTRLD	250.33	DMI OTH COMA UNCONTROLD

ICD-9-CM Diabetes long-term complication diagnosis codes:

250.40	DMII RENL NT ST UNCNTRLD	250.70	DMII CIRC NT ST UNCNTRLD
250.41	DMI RENL NT ST UNCNTRLD	250.71	DMI CIRC NT ST UNCNTRLD
250.42	DMII RENAL UNCNTRLD	250.72	DMII CIRC UNCNTRLD
250.43	DMI RENAL UNCNTRLD	250.73	DMI CIRC UNCNTRLD
250.50	DMII OPHTH NT ST UNCNTRL	250.80	DMII OTH NT ST UNCNTRLD
250.51	DMI OPHTH NT ST UNCNTRLD	250.81	DMI OTH NT ST UNCNTRLD
250.52	DMII OPHTH UNCNTRLD	250.82	DMII OTH UNCNTRLD
250.53	DMI OPHTH UNCNTRLD	250.83	DMI OTH UNCNTRLD
250.60	DMII NEURO NT ST UNCNTRL	250.90	DMII UNSPF NT ST UNCNTRL
250.61	DMI NEURO NT ST UNCNTRLD	250.91	DMI UNSPF NT ST UNCNTRLD
250.62	DMII NEURO UNCNTRLD	250.92	DMII UNSPF UNCNTRLD
250.63	DMI NEURO UNCNTRLD	250.93	DMI UNSPF UNCNTRLD

ICD-9-CM COPD diagnosis codes:

491	SIMPLE CHR BRONCHITIS	492.0	EMPHYSEMATOUS BLEB
491.1	MUCOPURUL CHR BRONCHITIS	492.8	EMPHYSEMA NEC
491.20	OBST CHR BRONC W/O EXAC	494	BRONCHIECTASIS
491.21	OBS CHR BRONC W(AC) EXAC	494.0	BRONCHIECTAS W/O AC EXAC
491.8	CHRONIC BRONCHITIS NEC	494.1	BRONCHIECTASIS W AC EXAC
491.9	CHRONIC BRONCHITIS NOS	496	CHR AIRWAY OBSTRUCT NEC

ICD-9-CM Asthma diagnosis codes:

493.00	EXTRINSIC ASTHMA NOS	493.21	CH OB ASTHMA W STAT ASTH
493.01	EXT ASTHMA W STATUS ASTH	493.22	CH OBST ASTH W (AC) EXAC
493.02	EXT ASTHMA W(ACUTE) EXAC	493.81	EXERCSE IND BRONCHOSPASM
493.10	INTRINSIC ASTHMA NOS	493.82	COUGH VARIANT ASTHMA
493.11	INT ASTHMA W STATUS ASTH	493.90	ASTHMA NOS
493.12	INT ASTHMA W (AC) EXAC	493.91	ASTHMA W STATUS ASTHMAT
493.20	CHRONIC OBST ASTHMA NOS	493.92	ASTHMA NOS W (AC) EXAC

ICD-9-CM Hypertension diagnosis codes:

401.0	MALIGNANT HYPERTENSION	403.10	BEN HY KID W CR KID I-IV
401.9	HYPERTENSION NOS	403.90	HY KID NOS W CR KID I-IV
402.00	MAL HYP HT DIS W/O HF	404.00	MAL HY HT/KD I-IV W/O HF
402.10	BENIGN HYP HT DIS W/O HF	404.10	BEN HY HT/KD I-IV W/O HF
402.90	HYP HRT DIS NOS W/O HF	404.90	HY HT/KD NOS I-IV W/O HF
403.00	MAL HY KID W CR KID I-IV		

ICD-9-CM Cardiac procedure codes:

00.50IMPL CRT PACEMAKER SYS35.11OPN AORTIC VALVULOPLASTY00.51IMPL CRT DEFIBRILLAT35.12OPN MITRAL VALVULOPLASTY00.52IMP/REP LEAD LF VEN SYS35.13OPN PULMON VALVULOPLASTY00.53IMP/REP CRT PACEMKR GEN35.14OPN TRICUS VALVULOPLASTY00.54IMP/REP CRT DEFIB GENAT35.20OPN/OTH REP HRT VLV NOS00.56INS/REP SENS-CRD/VSL MTR35.21OPN/OTH REP AORT VLV-TIS00.57IMP/REP SUBCUE CARD DEV35.22OPN/OTH REP AORTIC VALVE00.66PTCA35.23OPN/OTH REP MTRL VLV-TIS17.51IMPLANT CCM,TOTAL SYSTEM35.24OPN/OTH REP MITRAL VALVE17.52IMPLANT CCM PULSE GENRTR35.25OPN/OTH REP PULM VLV-TIS17.55TRANSLUM COR ATHERECTOMY35.26OPN/OTH REPL PUL VALVE35.00CLOSED VALVOTOMY NOS35.27OPN/OTH REP TCSPD VLV-TS35.01CLOSED AORTIC VALVOTOMY35.28OPN/OTH REPL TCSPD VALVE35.02CLOSED MITRAL VALVOTOMY35.31PAPILLARY MUSCLE OPS
00.52IMP/REP LEAD LF VEN SYS35.13OPN PULMON VALVULOPLASTY00.53IMP/REP CRT PACEMKR GEN35.14OPN TRICUS VALVULOPLASTY00.54IMP/REP CRT DEFIB GENAT35.20OPN/OTH REP HRT VLV NOS00.56INS/REP SENS-CRD/VSL MTR35.21OPN/OTH REP AORT VLV-TIS00.57IMP/REP SUBCUE CARD DEV35.22OPN/OTH REP AORTIC VALVE00.66PTCA35.23OPN/OTH REP MTRL VLV-TIS17.51IMPLANT CCM,TOTAL SYSTEM35.24OPN/OTH REP MITRAL VALVE17.52IMPLANT CCM PULSE GENRTR35.25OPN/OTH REP PULM VLV-TIS17.55TRANSLUM COR ATHERECTOMY35.26OPN/OTH REPL PUL VALVE35.00CLOSED VALVOTOMY NOS35.27OPN/OTH REP TCSPD VLV-TS35.01CLOSED AORTIC VALVOTOMY35.28OPN/OTH REPL TCSPD VALVE
00.53IMP/REP CRT PACEMKR GEN35.14OPN TRICUS VALVULOPLASTY00.54IMP/REP CRT DEFIB GENAT35.20OPN/OTH REP HRT VLV NOS00.56INS/REP SENS-CRD/VSL MTR35.21OPN/OTH REP AORT VLV-TIS00.57IMP/REP SUBCUE CARD DEV35.22OPN/OTH REP AORTIC VALVE00.66PTCA35.23OPN/OTH REP MTRL VLV-TIS17.51IMPLANT CCM,TOTAL SYSTEM35.24OPN/OTH REP MITRAL VALVE17.52IMPLANT CCM PULSE GENRTR35.25OPN/OTH REP PULM VLV-TIS17.55TRANSLUM COR ATHERECTOMY35.26OPN/OTH REPL PUL VALVE35.00CLOSED VALVOTOMY NOS35.27OPN/OTH REP TCSPD VLV-TS35.01CLOSED AORTIC VALVOTOMY35.28OPN/OTH REPL TCSPD VALVE
00.54IMP/REP CRT DEFIB GENAT35.20OPN/OTH REP HRT VLV NOS00.56INS/REP SENS-CRD/VSL MTR35.21OPN/OTH REP AORT VLV-TIS00.57IMP/REP SUBCUE CARD DEV35.22OPN/OTH REP AORTIC VALVE00.66PTCA35.23OPN/OTH REP MTRL VLV-TIS17.51IMPLANT CCM,TOTAL SYSTEM35.24OPN/OTH REP MITRAL VALVE17.52IMPLANT CCM PULSE GENRTR35.25OPN/OTH REP PULM VLV-TIS17.55TRANSLUM COR ATHERECTOMY35.26OPN/OTH REPL PUL VALVE35.00CLOSED VALVOTOMY NOS35.27OPN/OTH REP TCSPD VLV-TS35.01CLOSED AORTIC VALVOTOMY35.28OPN/OTH REPL TCSPD VALVE
00.56INS/REP SENS-CRD/VSL MTR35.21OPN/OTH REP AORT VLV-TIS00.57IMP/REP SUBCUE CARD DEV35.22OPN/OTH REP AORTIC VALVE00.66PTCA35.23OPN/OTH REP MTRL VLV-TIS17.51IMPLANT CCM,TOTAL SYSTEM35.24OPN/OTH REP MITRAL VALVE17.52IMPLANT CCM PULSE GENRTR35.25OPN/OTH REP PULM VLV-TIS17.55TRANSLUM COR ATHERECTOMY35.26OPN/OTH REPL PUL VALVE35.00CLOSED VALVOTOMY NOS35.27OPN/OTH REP TCSPD VLV-TS35.01CLOSED AORTIC VALVOTOMY35.28OPN/OTH REPL TCSPD VALVE
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17.51IMPLANT CCM,TOTAL SYSTEM35.24OPN/OTH REP MITRAL VALVE17.52IMPLANT CCM PULSE GENRTR35.25OPN/OTH REP PULM VLV-TIS17.55TRANSLUM COR ATHERECTOMY35.26OPN/OTH REPL PUL VALVE35.00CLOSED VALVOTOMY NOS35.27OPN/OTH REP TCSPD VLV-TS35.01CLOSED AORTIC VALVOTOMY35.28OPN/OTH REPL TCSPD VALVE
17.52IMPLANT CCM PULSE GENRTR35.25OPN/OTH REP PULM VLV-TIS17.55TRANSLUM COR ATHERECTOMY35.26OPN/OTH REPL PUL VALVE35.00CLOSED VALVOTOMY NOS35.27OPN/OTH REP TCSPD VLV-TS35.01CLOSED AORTIC VALVOTOMY35.28OPN/OTH REPL TCSPD VALVE
17.55TRANSLUM COR ATHERECTOMY35.26OPN/OTH REPL PUL VALVE35.00CLOSED VALVOTOMY NOS35.27OPN/OTH REP TCSPD VLV-TS35.01CLOSED AORTIC VALVOTOMY35.28OPN/OTH REPL TCSPD VALVE
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35.00 CLOSED VALVOTOMY NOS 35.27 OPN/OTH REP TCSPD VLV-TS 35.01 CLOSED AORTIC VALVOTOMY 35.28 OPN/OTH REPL TCSPD VALVE
35.01 CLOSED AORTIC VALVOTOMY 35.28 OPN/OTH REPL TCSPD VALVE
35.02 CLOSED MITRAL VALVOTOMY 35.31 PAPILLARY MUSCLE OPS
35.03 CLOSED PULMON VALVOTOMY 35.32 CHORDAE TENDINEAE OPS
35.04 CLOSED TRICUSP VALVOTOMY 35.33 ANNULOPLASTY
35.05 ENDOVAS REPL AORTC VALVE 35.34 INFUNDIBULECTOMY
35.06 TRNSAPCL REP AORTC VALVE 35.35 TRABECUL CARNEAE CORD OP
35.07 ENDOVAS REPL PULM VALVE 35.39 TISS ADJ TO VALV OPS NEC
35.08 TRNSAPCL REPL PULM VALVE 35.41 ENLARGE EXISTING SEP DEF
35.09 ENDOVAS REPL UNS HRT VLV 35.42 CREATE SEPTAL DEFECT
35.10 OPEN VALVULOPLASTY NOS 35.50 PROSTH REP HRT SEPTA NOS

(continued)

ICD-9-CM Cardiac procedure codes (continued):

35.52 PROS REP AIRIAL DEF-CU 36.19 HRT REVAS BYPS ANAS NEC 35.53 PROS REP LENTRIC DEF-OPN 36.2 ARTERIAL IMPLANT REVASC 35.54 PROS REP ENDOCAR CUSHION 36.3 OTH HEART REVASCULAR 35.55 PROS REP ENDOCAR CUSHION 36.3 OTH HEART REVASCULAR 35.56 GRFT REPAIR HRT SEPT NOS 36.31 OPEN CHEST TRANS REVASC 35.60 GRFT REPAIR HRT SEPT NOS 36.32 OTH TRANSMYO REVASCULAR 35.61 GRAFT REPAIR ATRIAL DEF 36.34 ENDO TRANSMYO REVASCULAR 35.62 GRAFT REPAIR VENTRIC DEF 36.34 PERC TRANSMYO REVASCULAR 35.63 GRFT REP ENDOCAR CUSHION 36.39 OTH HEART REVASULAR 35.70 HEART SEPTA REPAIR NOS 36.91 CORON VESS ANEURYSM REP 35.71 ATRIA SEPTA DEF REP NEC 37.31 PERICARDIECTOMY 35.72 VENTR SEPTA DEF REP NEC 37.31 PERICARDIECTOMY 35.73 ENDOCAR CUSHION REP NEC 37.32 HEART ANEURYSM EXCISION 35.81 TOT REPAIR TETRAL FALLOT 37.33 EXC/DEST HRT LES OTHER 35.83 TOT REPAIR OF TAPVC 37.34 EXC/DEST HRT LES OTHER 35.84 TOT COR TRANSPOS GRT VES 37.35 PARTIAL VENTRICULECTOMY 35.91 INTERAT VEN RETRN TRANSP 37.37 EXC/DEST HRT LES OTHER 35.92 CONDUIT RT VENT-PUL ART 37.41 IMPL CARDIAC SUPPORT DEV 35.93 CONDUIT RT VENT-PUL ART 37.51 HEART TRANSPLANTATION 35.94 CONDUIT RT VENT-RANSP 37.37 EXC/DEST HRT LES THRS PC 35.95 HEART REPAIR REVISION 37.55 REPLICARD SUPPORT DEV 35.96 PERC BALLOON VALVUPLASTY 37.51 REPLICAR TRANSPLANTATION 35.97 PERC MTRL VLV REPR W IMP 37.51 REPLICAR TRANSPLANTATION 35.98 OTHER HEART SEPTA OPS 37.55 REPLIRE THR UNT TOT HRT 35.99 OTHER HEART SEPTA OPS 37.55 REPLIRE THR UNT TOT HRT 35.90 OTHER HEART SEPTA OPS 37.55 REPLIRE THR UNT TOT HRT 36.01 PTCA-1 VESSEL WIO AGENT 37.61 MPLOST HRT LES SIST SYS 36.06 INS NONDRUG ELUT COR ST 37.61 INT INSER LEAD ATRI-VENT 36.10 AORTOCOR BYPAS-1 COR ART 37.75 INT INSER LEAD ATRI-VENT 36.11 AORTOCOR BYPAS-1 COR ART 37.75 RE	25.51	DD OG DED ATRIAL DEE ODN	26.17	ARR CORON AREERY RYPAGG
35.53 PROS REP VENTRIC DEF-OPN 36.2 ARTERIAL IMPLANT REVASC 35.54 PROS REP ENDOCAR CUSHION 36.3 OTH HEART REVASCULAR 35.55 PROS REP VENTRC DEF-CLOS 36.31 OPEN CHEST TRANS REVASC 35.60 GRFT REPAIR HRT SEPT NOS 36.32 OTH TRANSMYO REVASCULAR 35.61 GRAFT REPAIR ATRIAL DEF 36.33 ENDO TRANSMYO REVASCULAR 35.62 GRAFT REPAIR VENTRIC DEF 36.34 PROT RANSMYO REVASCULAR 35.63 GRFT REP ENDOCAR CUSHION 36.39 OTH HEART REVASULAR 35.70 HEART SEPTA REPAIR NOS 36.91 CORON VESS ANEURYSM REP 35.71 ATRIA SEPTA DEF REP NEC 36.99 HEART VESSEL OF NEC 37.31 PERICARDIECTOMY 35.73 ENDOCAR CUSHION REP NEC 37.31 PERICARDIECTOMY 35.73 ENDOCAR CUSHION REP NEC 37.31 PERICARDIECTOMY 35.82 TOT REPAIR TETRAL FALLOT 37.33 EXCIDEST HRT LESION OPEN 35.81 TOT REPAIR TETRAL FALLOT 37.34 EXCIDEST HRT LESION OPEN 35.81 TOT REPAIR OF TAPVC 37.34 EXCIDEST HRT LESION OPEN 35.81 TOT REPAIR TETRAL FALLOT 37.35 PARTIAL VENTRICULECTOMY 35.89 TOT REPAIR TETRAL FALLOT 37.31 EXCIDEST HRT LESION OPEN 35.91 INTERAT VEN RETRN TRANSP 37.36 EXC.DESTRCT.EXCLUS LAA 35.91 INTERAT VEN RETRN TRANSP 37.37 EXCIDENT TEXT LES OTHER 35.99 CONDUIT RET VENTR-AORTA 37.51 HEART TRANSPLANTATION 35.94 CONDUIT ARTIUM-PULM ART 37.51 HEART TRANSPLANTATION 35.95 PERC MALLOON VALVUPLASTY 37.53 REPL/REP THR UNT TOT HRT 35.97 PERC MTRL VIV. REPR W IMP 37.54 REPL/REP THR UNT TOT HRT SYS 35.99 OTHER HEART SEPTA OPS 37.60 MP BIVN EXT HRT AST SYS 36.01 PTCA-1 VESSEL WITH AGNT 37.61 PULSATION BALLOON IMPLAN 36.02 PTCA-1 VESSEL WITH AGNT 37.61 PULSATION BALLOON IMPLAN 36.03 OPEN CORONRY ANGIOPLASTY 37.62 MSRT NON-IMPL CIRC DEV 36.04 INTROGORNY THROMB INFUS 37.60 MP BIVN EXT	35.51	PROS REP ATRIAL DEF-OPN	36.17	ABD-CORON ARTERY BYPASS
35.54 PROS REP ENDOCAR CUSHION 36.3 OTH HEART REVASCULAR 35.55 PROS REP VENTRC DEF-CLOS 36.31 OPEN CHEST TRANS REVASC 35.60 GRFT REPAIR HRT SEPT NOS 36.32 OTH TRANSMYO REVASCULAR 35.61 GRAFT REPAIR VENTRIC DEF 36.33 ENDO TRANSMYO REVASCULAR 35.62 GRAFT REPAIR VENTRIC DEF 36.34 PERC TRANSMYO REVASCULAR 35.63 GRFT REP ENDOCAR CUSHION 36.99 OTH HEART REVASULAR 35.70 HEART SEPTA BEPAIR NOS 36.91 CORON VESS ANEURYSM REP 35.71 ATRIA SEPTA DEF REP NEC 37.31 PERICARDIECTOMY 35.73 ENDOCAR CUSHION REP NEC 37.31 PERICARDIECTOMY 35.73 ENDOCAR CUSHION REP NEC 37.32 HEART ANEURYSM EXCISION 35.81 TOT REPAIR TETRAL FALLOT 37.33 EXC/DEST HRT LESION OPEN 35.82 TOTAL REPAIR OF TAPVC 37.34 EXC/DEST HRT LESION OPEN 35.84 TOT COR TRANSPOS GRT VES 37.36 EXC,DESTRCT,EXCLUS LAA 35.91 INTERAT VEN RETRN TRANSP 37.37 PARTIAL VENTRICULECTOMY	-			
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35.60 GRFT REPAIR HRT SEPT NOS 36.32 OTH TRANSMYO REVASCULAR 35.61 GRAFT REPAIR ATRIAL DEF 36.33 ENDO TRANSMYO REVASCULAR 35.62 GRAFT REPAIR VENTRIC DEF 36.34 PERC TRANSMYO REVASCULAR 35.63 GRFT REP ENDOCAR CUSHION 36.39 OTH HEART REVASULAR 35.70 HEART SEPTA REPAIR NOS 36.91 CORON VESS ANEURYSM REP 35.71 ATRIA SEPTA DEF REP NEC 36.99 HEART VESSEL OP NEC 35.72 VENTR SEPTA DEF REP NEC 37.31 PERICARDIECTOMY 35.73 ENDOCAR CUSHION REP NEC 37.31 PERICARDIECTOMY 35.73 ENDOCAR CUSHION REP NEC 37.32 HEART ANEURYSM EXCISION 35.81 TOT REPAIR TETRAL FALLOT 37.33 EXC/DEST HRT LES OTHER 35.82 TOTAL REPAIR OF TAPVC 37.34 EXC/DEST HRT LES OTHER 35.83 TOT COR TRANSPOS GRT VES 37.36 EXC,DESTRCT,EXCLUS LAA 35.91 INTERAT VEN RETRN TRANSP 37.37 EXC/DEST HRT LES, THRSPC 35.92 CONDUIT ROTT-PUL ART 37.41 MPL CARDIAC SUPPORT DEV	-			
35.61 GRAFT REPAIR ATRIAL DEF 36.33 ENDO TRANSMYO REVASCULAR 35.62 GRAFT REPAIR VENTRIC DEF 36.34 PERC TRANSMYO REVASCULAR 35.63 GRFT REP ENDOCAR CUSHION 36.39 OTH HEART REVASULAR 35.70 HEART SEPTA REPAIR NOS 36.91 CORON VESS ANEURYSM REP 35.71 ATRIA SEPTA DEF REP NEC 36.99 HEART VESSEL OP NEC 35.72 VENTR SEPTA DEF REP NEC 37.31 PERICARDIECTOMY 35.73 ENDOCAR CUSHION REP NEC 37.32 HEART ANEURYSM EXCISION 35.81 TOT REPAIR TETRAL FALLOT 37.33 EXC/DEST HRT LESION OPEN 35.82 TOTAL REPAIR OF TAPVC 37.34 EXC/DEST HRT LESION OPEN 35.83 TOT REP TRUNCUS ARTERIOS 37.35 PARTIAL VENTRICULECTOMY 35.84 TOT COR TRANSPOS GRT VES 37.36 EXC,DESTRCT,EXCLUS LAA 35.91 INTERAT VEN RETRN TRANSP 37.37 EXC/DEST HRT LES, THRSPC 35.92 CONDUIT RT VENT-PUL ART 37.41 IMPL CARDIAC SUPPORT DEV 35.94 CONDUIT ARTIUM-PULM ART 37.51 HEART TRANSPLANTATION 35.95 HEART REPAIR REVISION 37.52 IMP TOT INT BI HT RP SYS 35.96 PERC BALLOON VALVUPLASTY 37.53 REPL/REP OTH TOT HRT SYS 35.99 OTHER HEART SEPTA OPS 37.55 REM INT BIVENT HRT SYS 35.99 OTHER HEART SEPTA OPS 37.50 IMP BIVN EXT HRT AST SYS 36.01 PTCA-1 VESSEL WIO AGENT 37.61 PULSATION BALLOON IMPLAN 36.02 PTCA-1 VESSEL WIO AGENT 37.61 PULSATION BALLOON IMPLAN 36.03 OPEN CORONRY ANGIOPLASTY 37.65 IMP VENT EXT HRT ASSIST SYS 36.00 INS NONDRUG ELUT COR ST 37.66 IMP LANTABLE HRT ASSIST SYS 36.01 NTRCORONRY THROMB INFUS 37.65 IMP VENT EXT HRT ASSIST SYS 36.06 INS NONDRUG ELUT COR ST 37.66 IMP LANTABLE HRT ASSIST SYS 36.07 INS DRUG-ELUT COR ST 37.66 IMP LANTABLE HRT ASSIST SYS 36.01 AORTOCOR BYPAS-1 COR ART 37.75 REPLICATION OF LEAD 36.11 AORTOCOR BYPAS-1 COR ART 37.76 REPLICATION OF LEAD 36.12 AORTOCOR BYPAS-1 COR ART 37.76 REPLICATION OF LEAD 36.15 1 INT MAM-COR ART BYPASS 37.77 REMOVAL OF LEAD W/O REPLICATION OF LEAD	-			
35.62 GRAFT REPAIR VENTRIC DEF 36.34 PERC TRANSMYO REVASCULAR 35.63 GRFT REP ENDOCAR CUSHION 36.39 OTH HEART REVASULAR 35.70 HEART SEPTA REPAIR NOS 36.91 CORON VESS ANEURYSM REP 35.71 ATRIA SEPTA DEF REP NEC 36.99 HEART VESSEL OP NEC 35.72 VENTR SEPTA DEF REP NEC 37.31 PERICARDIECTOMY 35.73 ENDOCAR CUSHION REP NEC 37.32 HEART ANEURYSM EXCISION 35.81 TOT REPAIR TETRAL FALLOT 37.33 EXC/DEST HRT LESION OPEN 35.82 TOTAL REPAIR OF TAPVC 37.34 EXC/DEST HRT LES OTHER 35.83 TOT REP TRUNCUS ARTERIOS 37.35 PARTIAL VENTRICULECTOMY 35.84 TOT COR TRANSPOS GRT VES 37.36 EXC/DEST HRT LES, OTHER 35.91 INTERAT VEN RETRN TRANSP 37.31 EXC/DEST HRT LES, THRSPC 35.92 CONDUIT RY VENT-PUL ART 37.41 IMPL CARDIACS SUPPORT DEV 35.93 CONDUIT ARTHUM-PULM ART 37.51 HEART TRANSPLANTATION 35.94 CONDUIT ARTHUM-PULM ART 37.51 HEART TRANSPLANTATION	-			
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35.95 HEART REPAIR REVISION 37.52 IMP TOT INT BI HT RP SYS 35.96 PERC BALLOON VALVUPLASTY 37.53 REPL/REP THR UNT TOT HRT 35.97 PERC MTRL VLV REPR W IMP 37.54 REPL/REP OTH TOT HRT SYS 35.98 OTHER HEART SEPTA OPS 37.55 REM INT BIVENT HRT SYS 35.99 OTHER HEART VALVE OPS 37.60 IMP BIVN EXT HRT AST SYS 36.01 PTCA-1 VESSEL W/O AGENT 37.61 PULSATION BALLOON IMPLAN 36.02 PTCA-1 VESSEL WITH AGNT 37.62 INSRT NON-IMPL CIRC DEV 36.03 OPEN CORONRY ANGIOPLASTY 37.63 REPAIR HEART ASSIST SYS 36.04 INTRCORONRY THROMB INFUS 37.64 REMVE EXT HRT ASSIST SYS 36.05 PTCA-MULTIPLE VESSEL 37.65 IMP VENT EXT HRT AST SYS 36.06 INS NONDRUG ELUT COR ST 37.66 IMPLANTABLE HRT ASSIST 36.07 INS DRUG-ELUT CORONRY ST 37.70 INT INSERT LEAD IN VENT 36.10 AORTOCOR ART OBSTR NEC 37.71 INT INSER LEAD ATRI-VENT 36.11 AORTOCOR BYPAS-1 COR ART 37.73 INT INSER LEAD IN ATRIU	35.93	CONDUIT LEFT VENTR-AORTA	37.5	HEART TRANSPLANTATION
35.96 PERC BALLOON VALVUPLASTY 37.53 REPL/REP THR UNT TOT HRT 35.97 PERC MTRL VLV REPR W IMP 37.54 REPL/REP OTH TOT HRT SYS 35.98 OTHER HEART SEPTA OPS 37.55 REM INT BIVENT HRT SYS 35.99 OTHER HEART VALVE OPS 37.60 IMP BIVN EXT HRT AST SYS 36.01 PTCA-1 VESSEL W/O AGENT 37.61 PULSATION BALLOON IMPLAN 36.02 PTCA-1 VESSEL WITH AGNT 37.62 INSRT NON-IMPL CIRC DEV 36.03 OPEN CORONRY ANGIOPLASTY 37.63 REPAIR HEART ASSIST SYS 36.04 INTRCORONRY THROMB INFUS 37.64 REMVE EXT HRT ASSIST SYS 36.05 PTCA-MULTIPLE VESSEL 37.65 IMP VENT EXT HRT AST SYS 36.06 INS NONDRUG ELUT COR ST 37.66 IMPLANTABLE HRT ASSIST 36.07 INS DRUG-ELUT CORONRY ST 37.70 INT INSERT LEAD IN VENT 36.10 AORTOCOR ART OBSTR NEC 37.71 INT INSER LEAD ATRI-VENT 36.11 AORTOCOR BYPAS-1 COR ART 37.73 INT INSER LEAD IN ATRIUM 36.12 AORTOCOR BYPAS-3 COR ART 37.75 REVISION OF LEAD <td>35.94</td> <td>CONDUIT ARTIUM-PULM ART</td> <td>37.51</td> <td>HEART TRANPLANTATION</td>	35.94	CONDUIT ARTIUM-PULM ART	37.51	HEART TRANPLANTATION
35.97 PERC MTRL VLV REPR W IMP 37.54 REPL/REP OTH TOT HRT SYS 35.98 OTHER HEART SEPTA OPS 37.55 REM INT BIVENT HRT SYS 35.99 OTHER HEART VALVE OPS 37.60 IMP BIVN EXT HRT AST SYS 36.01 PTCA-1 VESSEL W/O AGENT 37.61 PULSATION BALLOON IMPLAN 36.02 PTCA-1 VESSEL WITH AGNT 37.62 INSRT NON-IMPL CIRC DEV 36.03 OPEN CORONRY ANGIOPLASTY 37.63 REPAIR HEART ASSIST SYS 36.04 INTRCORONRY THROMB INFUS 37.64 REMVE EXT HRT ASSIST SYS 36.05 PTCA-MULTIPLE VESSEL 37.65 IMP VENT EXT HRT AST SYS 36.06 INS NONDRUG ELUT COR ST 37.66 IMPLANTABLE HRT ASSIST 36.07 INS DRUG-ELUT CORONRY ST 37.70 INT INSERT PACEMAK LEAD 36.09 REM OF COR ART OBSTR NEC 37.71 INT INSER LEAD IN VENT 36.10 AORTOCOR BYPAS-1 COR ART 37.72 INT INSER LEAD IN ATRIUM 36.12 AORTOCOR BYPAS-2 COR ART 37.74 INT OR REPL LEAD EPICAR 36.13 AORTOCOR BYPAS-3 COR ART 37.75 REVISION OF LEAD	35.95	HEART REPAIR REVISION	37.52	IMP TOT INT BI HT RP SYS
35.98OTHER HEART SEPTA OPS37.55REM INT BIVENT HRT SYS35.99OTHER HEART VALVE OPS37.60IMP BIVN EXT HRT AST SYS36.01PTCA-1 VESSEL W/O AGENT37.61PULSATION BALLOON IMPLAN36.02PTCA-1 VESSEL WITH AGNT37.62INSRT NON-IMPL CIRC DEV36.03OPEN CORONRY ANGIOPLASTY37.63REPAIR HEART ASSIST SYS36.04INTRCORONRY THROMB INFUS37.64REMVE EXT HRT ASSIST SYS36.05PTCA-MULTIPLE VESSEL37.65IMP VENT EXT HRT AST SYS36.06INS NONDRUG ELUT COR ST37.66IMPLANTABLE HRT ASSIST36.07INS DRUG-ELUT CORONRY ST37.70INT INSERT PACEMAK LEAD36.09REM OF COR ART OBSTR NEC37.71INT INSERT LEAD IN VENT36.10AORTOCORONARY BYPASS NOS37.72INT INSER LEAD ATRI-VENT36.11AORTOCOR BYPAS-1 COR ART37.73INT INSER LEAD IN ATRIUM36.12AORTOCOR BYPAS-2 COR ART37.74INT OR REPL LEAD EPICAR36.13AORTOCOR BYPAS-3 COR ART37.75REVISION OF LEAD36.14AORTCOR BYPAS-4+ COR ART37.76REPL TV ATRI-VENT LEAD36.151 INT MAM-COR ART BYPASS37.77REMOVAL OF LEAD W/O REPL	35.96	PERC BALLOON VALVUPLASTY	37.53	REPL/REP THR UNT TOT HRT
35.99OTHER HEART VALVE OPS37.60IMP BIVN EXT HRT AST SYS36.01PTCA-1 VESSEL W/O AGENT37.61PULSATION BALLOON IMPLAN36.02PTCA-1 VESSEL WITH AGNT37.62INSRT NON-IMPL CIRC DEV36.03OPEN CORONRY ANGIOPLASTY37.63REPAIR HEART ASSIST SYS36.04INTRCORONRY THROMB INFUS37.64REMVE EXT HRT ASSIST SYS36.05PTCA-MULTIPLE VESSEL37.65IMP VENT EXT HRT AST SYS36.06INS NONDRUG ELUT COR ST37.66IMPLANTABLE HRT ASSIST36.07INS DRUG-ELUT CORONRY ST37.70INT INSERT PACEMAK LEAD36.09REM OF COR ART OBSTR NEC37.71INT INSERT LEAD IN VENT36.10AORTOCORONARY BYPASS NOS37.72INT INSER LEAD ATRI-VENT36.11AORTOCOR BYPAS-1 COR ART37.73INT INSER LEAD IN ATRIUM36.12AORTOCOR BYPAS-2 COR ART37.74INT OR REPL LEAD EPICAR36.13AORTOCOR BYPAS-3 COR ART37.75REVISION OF LEAD36.14AORTCOR BYPAS-4+ COR ART37.76REPL TV ATRI-VENT LEAD36.151 INT MAM-COR ART BYPASS37.77REMOVAL OF LEAD W/O REPL	35.97	PERC MTRL VLV REPR W IMP	37.54	REPL/REP OTH TOT HRT SYS
36.01PTCA-1 VESSEL W/O AGENT37.61PULSATION BALLOON IMPLAN36.02PTCA-1 VESSEL WITH AGNT37.62INSRT NON-IMPL CIRC DEV36.03OPEN CORONRY ANGIOPLASTY37.63REPAIR HEART ASSIST SYS36.04INTRCORONRY THROMB INFUS37.64REMVE EXT HRT ASSIST SYS36.05PTCA-MULTIPLE VESSEL37.65IMP VENT EXT HRT AST SYS36.06INS NONDRUG ELUT COR ST37.66IMPLANTABLE HRT ASSIST36.07INS DRUG-ELUT CORONRY ST37.70INT INSERT PACEMAK LEAD36.09REM OF COR ART OBSTR NEC37.71INT INSERT LEAD IN VENT36.10AORTOCORONARY BYPASS NOS37.72INT INSER LEAD ATRI-VENT36.11AORTOCOR BYPAS-1 COR ART37.73INT INSER LEAD IN ATRIUM36.12AORTOCOR BYPAS-2 COR ART37.74INT OR REPL LEAD EPICAR36.13AORTOCOR BYPAS-3 COR ART37.75REVISION OF LEAD36.14AORTCOR BYPAS-4+ COR ART37.76REPL TV ATRI-VENT LEAD36.151 INT MAM-COR ART BYPASS37.77REMOVAL OF LEAD W/O REPL	35.98	OTHER HEART SEPTA OPS	37.55	REM INT BIVENT HRT SYS
36.02PTCA-1 VESSEL WITH AGNT37.62INSRT NON-IMPL CIRC DEV36.03OPEN CORONRY ANGIOPLASTY37.63REPAIR HEART ASSIST SYS36.04INTRCORONRY THROMB INFUS37.64REMVE EXT HRT ASSIST SYS36.05PTCA-MULTIPLE VESSEL37.65IMP VENT EXT HRT AST SYS36.06INS NONDRUG ELUT COR ST37.66IMPLANTABLE HRT ASSIST36.07INS DRUG-ELUT CORONRY ST37.70INT INSERT PACEMAK LEAD36.09REM OF COR ART OBSTR NEC37.71INT INSERT LEAD IN VENT36.10AORTOCORONARY BYPASS NOS37.72INT INSER LEAD ATRI-VENT36.11AORTOCOR BYPAS-1 COR ART37.73INT INSER LEAD IN ATRIUM36.12AORTOCOR BYPAS-2 COR ART37.74INT OR REPL LEAD EPICAR36.13AORTOCOR BYPAS-3 COR ART37.75REVISION OF LEAD36.14AORTCOR BYPAS-4+ COR ART37.76REPL TV ATRI-VENT LEAD36.151 INT MAM-COR ART BYPASS37.77REMOVAL OF LEAD W/O REPL	35.99	OTHER HEART VALVE OPS	37.60	IMP BIVN EXT HRT AST SYS
36.03OPEN CORONRY ANGIOPLASTY37.63REPAIR HEART ASSIST SYS36.04INTRCORONRY THROMB INFUS37.64REMVE EXT HRT ASSIST SYS36.05PTCA-MULTIPLE VESSEL37.65IMP VENT EXT HRT AST SYS36.06INS NONDRUG ELUT COR ST37.66IMPLANTABLE HRT ASSIST36.07INS DRUG-ELUT CORONRY ST37.70INT INSERT PACEMAK LEAD36.09REM OF COR ART OBSTR NEC37.71INT INSERT LEAD IN VENT36.10AORTOCORONARY BYPASS NOS37.72INT INSER LEAD ATRI-VENT36.11AORTOCOR BYPAS-1 COR ART37.73INT INSER LEAD IN ATRIUM36.12AORTOCOR BYPAS-2 COR ART37.74INT OR REPL LEAD EPICAR36.13AORTOCOR BYPAS-3 COR ART37.75REVISION OF LEAD36.14AORTCOR BYPAS-4+ COR ART37.76REPL TV ATRI-VENT LEAD36.151 INT MAM-COR ART BYPASS37.77REMOVAL OF LEAD W/O REPL	36.01	PTCA-1 VESSEL W/O AGENT	37.61	PULSATION BALLOON IMPLAN
36.04INTRCORONRY THROMB INFUS37.64REMVE EXT HRT ASSIST SYS36.05PTCA-MULTIPLE VESSEL37.65IMP VENT EXT HRT AST SYS36.06INS NONDRUG ELUT COR ST37.66IMPLANTABLE HRT ASSIST36.07INS DRUG-ELUT CORONRY ST37.70INT INSERT PACEMAK LEAD36.09REM OF COR ART OBSTR NEC37.71INT INSERT LEAD IN VENT36.10AORTOCORONARY BYPASS NOS37.72INT INSER LEAD ATRI-VENT36.11AORTOCOR BYPAS-1 COR ART37.73INT INSER LEAD IN ATRIUM36.12AORTOCOR BYPAS-2 COR ART37.74INT OR REPL LEAD EPICAR36.13AORTOCOR BYPAS-3 COR ART37.75REVISION OF LEAD36.14AORTCOR BYPAS-4+ COR ART37.76REPL TV ATRI-VENT LEAD36.151 INT MAM-COR ART BYPASS37.77REMOVAL OF LEAD W/O REPL	36.02	PTCA-1 VESSEL WITH AGNT	37.62	INSRT NON-IMPL CIRC DEV
36.05PTCA-MULTIPLE VESSEL37.65IMP VENT EXT HRT AST SYS36.06INS NONDRUG ELUT COR ST37.66IMPLANTABLE HRT ASSIST36.07INS DRUG-ELUT CORONRY ST37.70INT INSERT PACEMAK LEAD36.09REM OF COR ART OBSTR NEC37.71INT INSERT LEAD IN VENT36.10AORTOCORONARY BYPASS NOS37.72INT INSER LEAD ATRI-VENT36.11AORTOCOR BYPAS-1 COR ART37.73INT INSER LEAD IN ATRIUM36.12AORTOCOR BYPAS-2 COR ART37.74INT OR REPL LEAD EPICAR36.13AORTOCOR BYPAS-3 COR ART37.75REVISION OF LEAD36.14AORTCOR BYPAS-4+ COR ART37.76REPL TV ATRI-VENT LEAD36.151 INT MAM-COR ART BYPASS37.77REMOVAL OF LEAD W/O REPL	36.03	OPEN CORONRY ANGIOPLASTY	37.63	REPAIR HEART ASSIST SYS
36.06INS NONDRUG ELUT COR ST37.66IMPLANTABLE HRT ASSIST36.07INS DRUG-ELUT CORONRY ST37.70INT INSERT PACEMAK LEAD36.09REM OF COR ART OBSTR NEC37.71INT INSERT LEAD IN VENT36.10AORTOCORONARY BYPASS NOS37.72INT INSER LEAD ATRI-VENT36.11AORTOCOR BYPAS-1 COR ART37.73INT INSER LEAD IN ATRIUM36.12AORTOCOR BYPAS-2 COR ART37.74INT OR REPL LEAD EPICAR36.13AORTOCOR BYPAS-3 COR ART37.75REVISION OF LEAD36.14AORTCOR BYPAS-4+ COR ART37.76REPL TV ATRI-VENT LEAD36.151 INT MAM-COR ART BYPASS37.77REMOVAL OF LEAD W/O REPL	36.04	INTRCORONRY THROMB INFUS	37.64	REMVE EXT HRT ASSIST SYS
36.07INS DRUG-ELUT CORONRY ST37.70INT INSERT PACEMAK LEAD36.09REM OF COR ART OBSTR NEC37.71INT INSERT LEAD IN VENT36.10AORTOCORONARY BYPASS NOS37.72INT INSER LEAD ATRI-VENT36.11AORTOCOR BYPAS-1 COR ART37.73INT INSER LEAD IN ATRIUM36.12AORTOCOR BYPAS-2 COR ART37.74INT OR REPL LEAD EPICAR36.13AORTOCOR BYPAS-3 COR ART37.75REVISION OF LEAD36.14AORTCOR BYPAS-4+ COR ART37.76REPL TV ATRI-VENT LEAD36.151 INT MAM-COR ART BYPASS37.77REMOVAL OF LEAD W/O REPL	36.05	PTCA-MULTIPLE VESSEL	37.65	IMP VENT EXT HRT AST SYS
36.09REM OF COR ART OBSTR NEC37.71INT INSERT LEAD IN VENT36.10AORTOCORONARY BYPASS NOS37.72INT INSER LEAD ATRI-VENT36.11AORTOCOR BYPAS-1 COR ART37.73INT INSER LEAD IN ATRIUM36.12AORTOCOR BYPAS-2 COR ART37.74INT OR REPL LEAD EPICAR36.13AORTOCOR BYPAS-3 COR ART37.75REVISION OF LEAD36.14AORTCOR BYPAS-4+ COR ART37.76REPL TV ATRI-VENT LEAD36.151 INT MAM-COR ART BYPASS37.77REMOVAL OF LEAD W/O REPL	36.06	INS NONDRUG ELUT COR ST	37.66	IMPLANTABLE HRT ASSIST
36.10AORTOCORONARY BYPASS NOS37.72INT INSER LEAD ATRI-VENT36.11AORTOCOR BYPAS-1 COR ART37.73INT INSER LEAD IN ATRIUM36.12AORTOCOR BYPAS-2 COR ART37.74INT OR REPL LEAD EPICAR36.13AORTOCOR BYPAS-3 COR ART37.75REVISION OF LEAD36.14AORTCOR BYPAS-4+ COR ART37.76REPL TV ATRI-VENT LEAD36.151 INT MAM-COR ART BYPASS37.77REMOVAL OF LEAD W/O REPL	36.07	INS DRUG-ELUT CORONRY ST	37.70	INT INSERT PACEMAK LEAD
36.11AORTOCOR BYPAS-1 COR ART37.73INT INSER LEAD IN ATRIUM36.12AORTOCOR BYPAS-2 COR ART37.74INT OR REPL LEAD EPICAR36.13AORTOCOR BYPAS-3 COR ART37.75REVISION OF LEAD36.14AORTCOR BYPAS-4+ COR ART37.76REPL TV ATRI-VENT LEAD36.151 INT MAM-COR ART BYPASS37.77REMOVAL OF LEAD W/O REPL	36.09	REM OF COR ART OBSTR NEC	37.71	INT INSERT LEAD IN VENT
36.12AORTOCOR BYPAS-2 COR ART37.74INT OR REPL LEAD EPICAR36.13AORTOCOR BYPAS-3 COR ART37.75REVISION OF LEAD36.14AORTCOR BYPAS-4+ COR ART37.76REPL TV ATRI-VENT LEAD36.151 INT MAM-COR ART BYPASS37.77REMOVAL OF LEAD W/O REPL	36.10	AORTOCORONARY BYPASS NOS	37.72	INT INSER LEAD ATRI-VENT
36.12AORTOCOR BYPAS-2 COR ART37.74INT OR REPL LEAD EPICAR36.13AORTOCOR BYPAS-3 COR ART37.75REVISION OF LEAD36.14AORTCOR BYPAS-4+ COR ART37.76REPL TV ATRI-VENT LEAD36.151 INT MAM-COR ART BYPASS37.77REMOVAL OF LEAD W/O REPL	36.11	AORTOCOR BYPAS-1 COR ART	37.73	INT INSER LEAD IN ATRIUM
36.14AORTCOR BYPAS-4+ COR ART37.76REPL TV ATRI-VENT LEAD36.151 INT MAM-COR ART BYPASS37.77REMOVAL OF LEAD W/O REPL	36.12	AORTOCOR BYPAS-2 COR ART		INT OR REPL LEAD EPICAR
36.15 1 INT MAM-COR ART BYPASS 37.77 REMOVAL OF LEAD W/O REPL	36.13	AORTOCOR BYPAS-3 COR ART	37.75	REVISION OF LEAD
	36.15	1 INT MAM-COR ART BYPASS	37.77	REMOVAL OF LEAD W/O REPL
		2 INT MAM-COR ART BYPASS		

(continued)

ICD-9-CM Cardiac procedure codes (continued):

37.79	REV/RELOC CARD DEV POCKT	37.89	REVISE OR REMOVE PACEMAK
37.80	INT OR REPL PERM PACEMKR	37.94	IMPLT/REPL CARDDEFIB TOT
37.81	INT INSERT 1-CHAM, NON	37.95	IMPLT CARDIODEFIB LEADS
37.82	INT INSERT 1-CHAM, RATE	37.96	IMPLT CARDIODEFIB GENRATR
37.83	INT INSERT DUAL-CHAM DEV	37.97	REPL CARDIODEFIB LEADS
37.85	REPL PACEM W 1-CHAM, NON	37.98	REPL CARDIODEFIB GENRATR
37.86	REPL PACEM 1-CHAM, RATE	38.26	INSRT PRSR SNSR W/O LEAD
37.87	REPL PACEM W DUAL-CHAM		

ICD-9-CM Stage I-IV kidney disease diagnosis codes:

403.00	MAL HY KID W CR KID I-IV	404.00	MAL HY HT/KD I-IV W/O HF
403.10	BEN HY KID W CR KID I-IV	404.10	BEN HY HT/KD I-IV W/O HF
403.90	HY KID NOS W CR KID I-IV	404.90	HY HT/KD NOS I-IV W/O HF

ICD-9-CM Dialysis access procedure codes:

38.95	VEN CATH RENAL DIALYSIS	39.43	REMOV REN DIALYSIS SHUNT
39.27	DIALYSIS ARTERIOVENOSTOM	39.93	INSERT VES-TO-VES CANNUL
39.29	VASC SHUNT & BYPASS NEC	39.94	REPLAC
39.42	REVIS REN DIALYSIS SHUNT		

ICD-9-CM Heart failure diagnosis codes:

398.91	RHEUMATIC HEART FAILURE	428.31	AC DIASTOLIC HRT FAILURE
428.0	CHF NOS	428.32	CHR DIASTOLIC HRT FAIL
428.1	LEFT HEART FAILURE	428.33	AC ON CHR DIAST HRT FAIL
428.20	SYSTOLIC HRT FAILURE NOS	428.40	SYST/DIAST HRT FAIL NOS
428.21	AC SYSTOLIC HRT FAILURE	428.41	AC SYST/DIASTOL HRT FAIL
428.22	CHR SYSTOLIC HRT FAILURE	428.42	CHR SYST/DIASTL HRT FAIL
428.23	AC ON CHR SYST HRT FAIL	428.43	AC/CHR SYST/DIA HRT FAIL
428.30	DIASTOLC HRT FAILURE NOS	428.9	HEART FAILURE NOS

ICD-9-CM Dehydration diagnosis codes:

276.5	HYPOVOLEMIA	276.51	DEHYDRATION
276.50	VOLUME DEPLETION NOS	276.52	HYPOVOLEMIA

ICD-9-CM Hyperosmolality and/or hypernatremia diagnosis codes:

276.0 HYPEROSMOLALITY

ICD-9-CM Gastroenteritis diagnosis codes:

008.61	INTES INFEC ROTAVIRUS	008.69	OTHER VIRAL INTES INFEC
008.62	INTES INFEC ADENOVIRUS	008.8	VIRAL ENTERITIS NOS
008.63	INT INF NORWALK VIRUS	009.0	INFECTIOUS ENTERITIS NOS
008.64	INT INF OTH SML RND VRUS	009.1	ENTERITIS OF INFECT ORIG
008.65	ENTERITIS D/T CALICIVIRS	009.2	INFECTIOUS DIARRHEA NOS
008.66	INTES INFEC ASTROVIRUS	009.3	DIARRHEA OF INFECT ORIG
008.67	INT INF ENTEROVIRUS NEC	558.9	NONINF GASTROENTERIT NEC

ICD-9-CM Acute kidney injury diagnosis codes:

584.5	AC KIDNY FAIL, TUBR NECR	584.9	ACUTE KIDNEY FAILURE, NOS
584.6	AC KIDNY FAIL, CORT NECR	586	RENAL FAILURE NOS
584.7	AC KIDNY FAIL, MEDU NECR	997.5	SURG COMPL-URINARY TRACT
584.8	ACUTE KIDNEY FAILURE NEC		

ICD-9-CM Chronic renal failure diagnosis codes:

403.00	MAL HY KID W CR KID I-IV	404.12	BEN HY HT/KD ST V W/O HF
403.01	MAL HYP KID W CR KID V	404.13	BEN HYP HT/KD STG V W HF
403.10	BEN HY KID W CR KID I-IV	404.90	HY HT/KD NOS I-IV W/O HF
403.11	BEN HYP KID W CR KID V	404.91	HYP HT/KD NOS I-IV W HF
403.90	HY KID NOS W CR KID I-IV	404.92	HY HT/KD NOS ST V W/O HF
403.91	HYP KID NOS W CR KID V	404.93	HYP HT/KD NOS ST V W HF
404.00	MAL HY HT/KD I-IV W/O HF	585	CHRONIC RENAL FAILURE
404.10	BEN HY HT/KD I-IV W/O HF	585.5	CHRON KIDNEY DIS STAGE V
404.11	BEN HYP HT/KD I-IV W HF	585.6	END STAGE RENAL DISEASE

ICD-9-CM Bacterial pneumonia diagnosis codes:

481	PNEUMOCOCCAL PNEUMONIA	482.42	METH RES PNEU D/T STAPH
482.2	H.INFLUENZAE PNEUMONIA	482.9	BACTERIAL PNEUMONIA NOS
482.30	STREPTOCOCCAL PNEUMN NOS	483.0	PNEU MYCPLSM PNEUMONIAE
482.31	PNEUMONIA STRPTOCOCCUS A	483.1	PNEUMONIA D/T CHLAMYDIA
482.32	PNEUMONIA STRPTOCOCCUS B	483.8	PNEUMON OTH SPEC ORGNSM
482.39	PNEUMONIA OTH STREP	485	BRONCOPNEUMONIA ORG NOS
482.41	METH SUS PNEUM D/T STAPH	486	PNEUMONIA, ORGANISM NOS

ICD-9-CM Sickle cell or HB-S diagnosis codes:

282.41	THLASEMA HB-S W/O CRISIS	282.63	HB-SS/HB-C DIS W/O CRSIS
282.42	THLASSEMIA HB-S W CRISIS	282.64	HB-S/HB-C DIS W CRISIS
282.60	SICKLE CELL DISEASE NOS	282.68	HB-S DIS W/O CRISIS NEC
282.61	HB-SS DISEASE W/O CRISIS	282.69	HB-SS DIS NEC W CRISIS
282.62	HB-SS DISEASE W CRISIS		

ICD-9-CM Immunocompromised state diagnosis codes:

136.3 PNEUMOCYSTOSIS 288.0 AGRANULOCYTOSIS 199.2 MALIG NEOPL-TRANSP ORGAN 288.00 NEUTROPENIA NOS 238.73 HI GRDE MYELODYS SYN LES 288.02 CYCLIC NEUTROPENIA 238.76 MYELOFI W MYELO METAPLAS 288.03 DRUG INDUCED NEUTROPENIA 238.77 POST TP LYMPHPROLIF DIS 288.09 NEUTROPENIA NEC 238.79 LYMPH/HEMATPOITC TIS NEC 288.2 GENETIC ANOMALY LEUKOCYT 260 KWASHIORKOR 288.4 HEMOPHAGOCYTIC 500 SWASHIORKOR 288.5 LEUKOCYTOPENIA NOS 261 NUTRITIONAL MARASMUS 288.50 LEUKOCYTOPENIA NOS 262 OTH SEVERE MALNUTRITION 288.51 LYMPHOCYTOPENIA NOS 279.00 HYPOGAMMAGLOBULINEM NOS 288.59 DECREASED WBC COUNT NEC 279.01 SELECTIVE IG MIMUNODEF 289.53 NEUTROPENIC SPLENOMEGALY 279.02 SELECTIVE IG DEFIC NEC 403.01 MAL HYP KID W CR KID V 279.04 CONG 403.11 BEN HYP KID W CR KID V 279.05 IMMUNODEFIC W HYPER-IGM 403.91 HYP KID NOS W CR KID V 279.06 COMMON VARIABL MMUNODEF WHYPER-IGM 404.02 MAL HY HT/KD ST V W/O HF 279.10 IMMUNODEF WHYPER-IGM 404.02 MAL HY HT/KD ST V W/O HF 279.11 DIGEORGE'S SYNDROME 404.13 BEN HYP HT/KD STG V W HF 279.12 WISKOTT-ALDRICH SYNDROME 404.92 HYP HT/KD STG V W HF 279.13 NEZELOF'S SYNDROME 404.93 HYP HT/KD NOS ST V W/O HF 279.14 NEZELOF'S SYNDROME 404.92 HYP HT/KD NOS ST V W HF 279.15 MEZELOF'S SYNDROME 404.92 HYP HT/KD NOS ST V W HF 279.16 COMBINED IMMUNITY DEFIC 585 CHRONIC KIDNEY DISEASE 279.41 AUTOIMMUNE DISEASE, NOT ELSEWHERE CLASSIFIED 279.42 AUTOIMMUNE DISEASE NEC 996.80 COMPLICATIONS OF 279.49 AUTOIMMUNE DISEASE NEC 996.81 COMPLICATIONS OF 279.53 AC ON CHRN GRFT-VS-HOST DIS 996.82 COMPLICATIONS PLANTED ORGAN 279.53 AC ON CHRN GRFT-VS-HOST DIS 996.83 COMPLICATIONS PLANTED ORGAN 279.53 AC ON CHRN GRFT-VS-HOST DIS 996.85 COMPLICATIONS PLANTED ORGAN 279.54 AUTOIMMUNE DISEASE NEC 996.85 COMPLICARS TRANSPLANT 279.53 AC ON CHRN	042	HUMAN IMMUNO VIRUS DIS	284.19	OTHER PANCYTOPENIA
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279.3IMMUNITY DEFICIENCY NOS585.5CHRON KIDNEY DIS STAGE V279.4AUTOIMMUNE DISEASE, NOT ELSEWHERE CLASSIFIED585.6END STAGE RENAL DISEASE279.41AUTOIMMUN LYMPHPROF SYND996.8COMPLICATIONS OF TRANSPLANTED ORGAN279.49AUTOIMMUNE DISEASE NEC996.80COMP ORGAN TRANSPLNT NOS279.50GRAFT-VERSUS-HOST NOS996.81COMPL KIDNEY TRANSPLANT279.51AC GRAFT-VERSUS-HOST DIS996.82COMPL LIVER TRANSPLANT279.52CHRONC GRAFT-VS-HOST DIS996.83COMPL HEART TRANSPLANT279.53AC ON CHRN GRFT-VS-HOST996.84COMPL LUNG TRANSPLANT279.8IMMUNE MECHANISM DIS NEC996.85COMPL MARROW TRANSPLANT279.9IMMUNE MECHANISM DIS NOS996.86COMPL PANCREAS TRANSPLNT284.09CONST APLASTC ANEMIA NEC996.87COMP INTESTINE TRANSPLNT	279.19	DEFIC CELL IMMUNITY NOS	579.3	INTEST POSTOP NONABSORB
279.4 AUTOIMMUNE DISEASE, NOT ELSEWHERE CLASSIFIED 279.41 AUTOIMMUN LYMPHPROF SYND 996.8 COMPLICATIONS OF TRANSPLANTED ORGAN 279.49 AUTOIMMUNE DISEASE NEC 996.80 COMP ORGAN TRANSPLNT NOS 279.50 GRAFT-VERSUS-HOST NOS 996.81 COMPL KIDNEY TRANSPLANT 279.51 AC GRAFT-VERSUS-HOST DIS 996.82 COMPL LIVER TRANSPLANT 279.52 CHRONC GRAFT-VS-HOST DIS 996.83 COMPL HEART TRANSPLANT 279.53 AC ON CHRN GRFT-VS-HOST 996.84 COMPL LUNG TRANSPLANT 279.8 IMMUNE MECHANISM DIS NEC 996.85 COMPL MARROW TRANSPLANT 279.9 IMMUNE MECHANISM DIS NOS 996.86 COMPL PANCREAS TRANSPLNT 284.09 CONST APLASTC ANEMIA NEC 996.87 COMP INTESTINE TRANSPLNT	279.2	COMBINED IMMUNITY DEFIC	585	CHRONIC KIDNEY DISEASE
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279.51AC GRAFT-VERSUS-HOST DIS996.82COMPL LIVER TRANSPLANT279.52CHRONC GRAFT-VS-HOST DIS996.83COMPL HEART TRANSPLANT279.53AC ON CHRN GRFT-VS-HOST996.84COMPL LUNG TRANSPLANT279.8IMMUNE MECHANISM DIS NEC996.85COMPL MARROW TRANSPLANT279.9IMMUNE MECHANISM DIS NOS996.86COMPL PANCREAS TRANSPLNT284.09CONST APLASTC ANEMIA NEC996.87COMP INTESTINE TRANSPLNT				
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279.53AC ON CHRN GRFT-VS-HOST996.84COMPL LUNG TRANSPLANT279.8IMMUNE MECHANISM DIS NEC996.85COMPL MARROW TRANSPLANT279.9IMMUNE MECHANISM DIS NOS996.86COMPL PANCREAS TRANSPLNT284.09CONST APLASTC ANEMIA NEC996.87COMP INTESTINE TRANSPLNT				
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284.09 CONST APLASTC ANEMIA NEC 996.87 COMP INTESTINE TRANSPLNT				
284.1 PANCYTOPENIA 996.88 COMPTP ORGAN-STEM CELL	284.1	PANCYTOPENIA	996.88	COMP TP ORGAN-STEM CELL
284.11 ANTIN CHEMO INDCD PANCYT 996.89 COMP OTH ORGAN TRANSPLNT		ANTIN CHEMO INDCD PANCYT		
284.12 OTH DRG INDCD PANCYTOPNA V42.0 KIDNEY TRANSPLANT STATUS				
288.01 CONGENITAL NEUTROPENIA V42.83 TRNSPL STATUS-PANCREAS		CONGENITAL NEUTROPENIA		

(continued)

ICD-9-CM Immunocompromised state diagnosis codes (continued):

V42.1	HEART TRANSPLANT STATUS	V42.89	TRNSPL STATUS ORGAN NEC
V42.6	LUNG TRANSPLANT STATUS	V45.1	RENAL DIALYSIS STATUS
V42.7	LIVER TRANSPLANT STATUS	V45.11	RENAL DIALYSIS STATUS
V42.8	OTHER SPECIFIED ORGAN OR	V56.0	RENAL DIALYSIS ENCOUNTER
	TISSUE		
V42.81	TRNSPL STATUS-BNE MARROW	V56.1	FT/ADJ XTRCORP DIAL CATH
V42.82	TRSPL STS-PERIP STM CELL	V56.2	FIT/ADJ PERIT DIAL CATH
V42.84	TRNSPL STATUS-INTESTINES		

ICD-9-CM Immunocompromised state procedure codes:

00.18	INFUS IMMUNOSUP ANTIBODY	41.06	CORD BLD STEM CELL TRANS
33.5	LUNG TRANSPLANTATION	41.07	AUTO HEM STEM CT W PURG
33.50	LUNG TRANSPLANT NOS	41.08	ALLO HEM STEM CT W PURG
33.51	UNILAT LUNG TRANSPLANT	41.09	AUTO BONE MT W PURGING
33.52	BILAT LUNG TRANSPLANT	50.51	AUXILIARY LIVER TRANSPL
33.6	COMB HEART/LUNG TRANSPLA	50.59	LIVER TRANSPLANT NEC
37.5	HEART TRANSPLANTATION	52.80	PANCREAT TRANSPLANT NOS
37.51	HEART TRANSPLANTATION	52.81	REIMPLANT PANCREATIC TIS
41.0	OPERATIONS ON BONE	52.82	PANCREATIC HOMOTRANSPLAN
	MARROW AND SPLEEN		
41.00	BONE MARROW TRNSPLNT NOS	52.83	PANCREATIC HETEROTRANSPL
41.01	AUTO BONE MT W/O PURG	52.85	ALLOTRNSPLNT ISLETS LANG
41.02	ALO BONE MARROW TRNSPLNT	52.86	TRNSPLNT ISLETS LANG NOS
41.03	ALLOGRFT BONE MARROW NOS	55.69	KIDNEY TRANSPLANT NEC
41.04	AUTO HEM STEM CT W/O PUR	41.06	CORD BLD STEM CELL TRANS
41.05	ALLO HEM STEM CT W/O PUR		

ICD-9-CM Urinary tract infection diagnosis codes:

590.10	AC PYELONEPHRITIS NOS	590.81	PYELONEPHRIT IN OTH DIS
590.11	AC PYELONEPHR W MED NECR	590.9	INFECTION OF KIDNEY NOS
590.2	RENAL/PERIRENAL ABSCESS	595.0	ACUTE CYSTITIS
590.3	PYELOURETERITIS CYSTICA	595.9	CYSTITIS NOS
590.80	PYELONEPHRITIS NOS	599.0	URIN TRACT INFECTION NOS

ICD-9-CM Kidney/urinary tract disorder diagnosis codes:

590.00	CHR PYELONEPHRTIS NOS	753.17	MEDULLARY SPONGE KIDNEY
590.01	CHR PYELONEPH W MED NECR	753.19	CYSTIC KIDNEY DISEAS NEC
593.70	VESCOURETRL RFLUX UNSPCF	753.20	OBS DFCT REN PLV&URT NOS
593.71	VSCURT RFLX NPHT UNILTRL	753.21	CONGEN OBST URTROPLV JNC
593.72	VSCOURTL RFLX NPHT BLTRL	753.22	CONG OBST URETEROVES JNC
593.73	VSCOURTL RFLX W NPHT NOS	753.23	CONGENITAL URETEROCELE
753.0	RENAL AGENESIS	753.29	OBST DEF REN PLV&URT NEC
753.10	CYSTIC KIDNEY DISEAS NOS	753.3	KIDNEY ANOMALY NEC
753.11	CONGENITAL RENAL CYST	753.4	URETERAL ANOMALY NEC
753.12	POLYCYSTIC KIDNEY NOS	753.5	BLADDER EXSTROPHY
753.13	POLYCYST KID-AUTOSOM DOM	753.6	CONGEN URETHRAL STENOSIS
753.14	POLYCYST KID-AUTOSOM REC	753.8	CYSTOURETHRAL ANOM NEC
753.15	RENAL DYSPLASIA	753.9	URINARY ANOMALY NOS
753.16	MEDULLARY CYSTIC KIDNEY		

ICD-9-CM Angina diagnosis codes:

411.1	INTERMED CORONARY SYND	413.0	ANGINA DECUBITUS
411.81	ACUTE COR OCCLSN W/O MI	413.1	PRINZMETAL ANGINA
411.89	AC ISCHEMIC HRT DIS NEC	413.9	ANGINA PECTORIS NEC/NOS

ICD-9-CM Uncontrolled diabetes diagnosis codes:

250.02	DMII WO CMP UNCNTRLD	250.03	DMI WO CMP UNCNTRLD
	Divini W O Civil Civilina		DIVID VIOLOTICE

ICD-9-CM Cystic fibrosis and anomalies of the respiratory system diagnosis codes:

277.00	CYSTIC FIBROS W/O ILEUS	748.3	LARYNGOTRACH ANOMALY
			NEC
277.01	CYSTIC FIBROSIS W ILEUS	748.4	CONGENITAL CYSTIC LUNG
277.02	CYSTIC FIBROS W PUL MAN	748.5	AGENESIS OF LUNG
277.03	CYSTIC FIBROSIS W GI MAN	748.60	LUNG ANOMALY NOS
277.09	CYSTIC FIBROSIS NEC	748.61	CONGEN BRONCHIECTASIS
516.61	NEUROEND CELL HYPRPL INF	748.69	LUNG ANOMALY NEC
516.62	PULM INTERSTITL GLYCOGEN	748.8	RESPIRATORY ANOMALY NEC
516.63	SURFACTANT MUTATION LUNG	748.9	RESPIRATORY ANOMALY NOS
516.64	ALV CAP DYSP W VN MISALIGN	750.3	CONG ESOPH FISTULA/ATRES
516.69	OTH INTRST LUNG DIS CHLD	759.3	SITUS INVERSUS
747.21	ANOMALIES OF AORTIC ARCH	770.7	PERINATAL CHR RESP DIS

ICD-9-CM Lower-extremity amputation procedure codes:

84.10	LOWER LIMB AMPUTAT NOS	84.15	BELOW KNEE AMPUTAT NEC
84.11	TOE AMPUTATION	84.16	DISARTICULATION OF KNEE
84.12	AMPUTATION THROUGH FOOT	84.17	ABOVE KNEE AMPUTATION
84.13	DISARTICULATION OF ANKLE	84.18	DISARTICULATION OF HIP
84.14	AMPUTAT THROUGH MALLEOLI	84.19	HINDQUARTER AMPUTATION

ICD-9-CM Diabetes diagnosis codes:

250.00	DMII WO CMP NT ST UNCNTR	250.50	DMII OPHTH NT ST UNCNTRL
250.01	DMI WO CMP NT ST UNCNTRL	250.51	DMI OPHTH NT ST UNCNTRLD
250.02	DMII WO CMP UNCNTRLD	250.52	DMII OPHTH UNCNTRLD
250.03	DMI WO CMP UNCNTRLD	250.53	DMI OPHTH UNCNTRLD
250.10	DMII KETO NT ST UNCNTRLD	250.60	DMII NEURO NT ST UNCNTRL
250.11	DMI KETO NT ST UNCNTRLD	250.61	DMI NEURO NT ST UNCNTRLD
250.12	DMII KETOACD UNCONTROLD	250.62	DMII NEURO UNCNTRLD
250.13	DMI KETOACD UNCONTROLD	250.63	DMI NEURO UNCNTRLD
250.20	DMII HPRSM NT ST UNCNTRL	250.70	DMII CIRC NT ST UNCNTRLD
250.21	DMI HPRSM NT ST UNCNTRLD	250.71	DMI CIRC NT ST UNCNTRLD
250.22	DMII HPROSMLR UNCONTROLD	250.72	DMII CIRC UNCNTRLD
250.23	DMI HPROSMLR UNCONTROLD	250.73	DMI CIRC UNCNTRLD
250.30	DMII O CM NT ST UNCNTRLD	250.80	DMII OTH NT ST UNCNTRLD
250.31	DMI O CM NT ST UNCNTRL	250.81	DMI OTH NT ST UNCNTRLD
250.32	DMII OTH COMA UNCONTROLD	250.82	DMII OTH UNCNTRLD
250.33	DMI OTH COMA UNCONTROLD	250.83	DMI OTH UNCNTRLD
250.40	DMII RENL NT ST UNCNTRLD	250.90	DMII UNSPF NT ST UNCNTRL
250.41	DMI RENL NT ST UNCNTRLD	250.91	DMI UNSPF NT ST UNCNTRLD
250.42	DMII RENAL UNCNTRLD	250.92	DMII UNSPF UNCNTRLD
250.43	DMI RENAL UNCNTRLD	250.93	DMI UNSPF UNCNTRLD

ICD-9-CM traumatic amputation of the lower extremity diagnosis codes:

895.0	AMPUTATION TOE	897.1	AMPUTAT BK, UNILAT-COMPL
895.1	AMPUTATION TOE-COMPLICAT	897.2	AMPUT ABOVE KNEE, UNILAT
896.0	AMPUTATION FOOT, UNILAT	897.3	AMPUT ABV KN, UNIL-COMPL
896.1	AMPUT FOOT, UNILAT-COMPL	897.4	AMPUTAT LEG, UNILAT NOS
896.2	AMPUTATION FOOT, BILAT	897.5	AMPUT LEG, UNIL NOS-COMP
896.3	AMPUTAT FOOT, BILAT-COMP	897.6	AMPUTATION LEG, BILAT
897.0	AMPUT BELOW KNEE, UNILAT	897.7	AMPUTAT LEG, BILAT-COMPL

 $\label{lem:source:ahrq_prevention} \textbf{Source: AHRQ Prevention Quality Indicators Technical Specifications - Version 4.4, March 2012} \\ \underline{\text{http://www.qualityindicators.ahrq.gov/Modules/PQI_TechSpec.aspx}} \\ \\$



Measure Specification:

Hospital 30-Day Readmissions: All Cause, Surgical and Medical

Measure Set ID	#6	Version Number	7
Version Effective Date	September 18, 2014	Date Endorsed	
Care Setting	Hospital	Unit of Measurement	Percentage
Measurement Duration	Quarterly	Measurement Period	January 1, 2012 – December 31, 2014
Measure Type	Outcome	Measure Scoring	Percentage
Payer source	Commercial claims initially	Improvement notation	Higher rates indicate poorer quality
Origin of Measure	HEDIS Modifications done in accordance with recommendations from Brown University.		
Measure description	The percentage of acute inpatient stays that were followed by a readmission within 30 days for any reason in adults ages 18 and older.		
References	National Committee for Quality Assurance (NCQA). HEDIS® 2011: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2010. Various pages. http://qualitymeasures.ahrq.gov/content.aspx?id=34135		

	V2: If had a readmission, include the index admission in the denominator regardless of whether there was coverage in the full 30 days after discharge.
	V3: Changed to including discharges from patients with at least one day of coverage in the denominator instead of only including discharges from patients covered for the full quarter. Clarified that the denominator includes discharges for "all RI residents and non-RI residents attributed to an RI provider."
Release Notes/ Summary of Changes	V4: Removed restriction of "adults ages 18 years and older" since children will now be included in the rates. Extended measurement period. Removed restriction of "Include discharges to acute care hospitals only. (See Technical Notes document for list of included hospitals). Exclude admissions to specialty hospitals, mental health hospitals, rehabilitation facilities, and skilled nursing facilities" from the denominator details.
	V5: Added split between Surgical and Medical index admissions based on DRG code.
	V6: Added in restriction to include discharges and readmissions to acute care hospitals only. Exclude any discharges or readmissions for pregnancy, dental health, mental health, or chemical dependency services.
	V7: Added in billing code restrictions to be consistent with restrictions for inpatient stay measure.

Technical Specifications				
Target Population	et Population Members with a hospital discharge.			
Denominator				
Denominator Statement	• Medical: Number of discharges where the hospital admission was for			
Denominator Details Include discharges for all patients who were covered for at least one day in quarter¹ and if no readmission in the 30 days post discharge, coverage for a least 30 days after discharge². Include discharges for all RI residents and no RI provider. Include discharges to acute care hospitals only.				

Original HEDIS measure required coverage for 365 days (with one allowable gap of up to 45 days) prior to the discharge.

Original HEDIS measurement required 30 days post discharge for all index admissions.

Based on discharges, not members, so multiple discharges per patient are allowed as long as they meet the criteria. *Note: An admission can count as both a readmission and a subsequent index admission. See Exhibit 1 below*³.

If there was a transfer between acute facilities, use discharge date from facility transferred to as the discharge date.

If the DRG code for the discharge (index admission) is one of the following:

052-103

121-125

146-159

175-208

280-316

368-395

432-446

533-566

592-607

637-645

682-700

722-730

754-761

774-782

789-795

808-816

834-849

862-872

880-887

894-897

913-923

933-935

945-951

963-965

974-977 include in the medical readmission measure.

If the DRG code for the discharge (index admission) is one of the following:

001-013

020-042

113-117

129-139

163-168

215-265

326-358

405-425

453-517

573-585

614-630

³ Original HEDIS measure excluded any stays that were within 30 days from a previous discharge.

	652-675		
	707-718		
	734-750		
	765-770		
	799-804		
	820-830		
	853-858		
	876		
	901-909		
	927-929 939-941		
	955-969		
	970		
	981-989 include in the surgical readmission measure.		
	Include all DRGs in the All Cause readmission measure.		
	Exclude stays where admission and discharge date are the same.		
	Exclude stays where discharged because of death.		
	Exclude admissions where the principal diagnosis is any of the following		
	pregnancy-related ICD-9 codes:		
	• Complications of Pregnancy, Childbirth, and the Puerperium (630.xx–679.xx)		
	Newborn (Perinatal) Guidelines (760.xx–779.xx)		
	 V20.xx Health supervision of infant or child 		
	 V20.xx Health supervision of infant of child V22.xx Normal pregnancy 		
	1700 G		
	 V23.xx Supervision of high-risk pregnancy V24.xx Postpartum care and evaluation 		
Denominator	 V24.xx Postpartum care and evaluation V27.xx Outcome of delivery 		
Exceptions and	 V27.xx Outcome of derivery V28.xx Antenatal screening 		
Exclusions	· · · · · · · · · · · · · · · · · · ·		
	 V29.xx Observation and evaluation of newborns for suspected condition not found 		
	 V30.xx–V39.xx Liveborn infant according to type of birth 		
	V 50.xx – V 59.xx Liveboth infant according to type of birth		
	English a admissions where the mineral discussions for montal books more		
	Exclude admissions where the principal diagnosis is for mental health purposes		
	or the visit is related to chemical dependency, as defined by • CPT codes 90801–90899 ⁴		
	• principal ICD-9-CM diagnosis codes 290.xx-316.xx		
	• ICD-9-CM procedure code 94.26, 94.27 or 94.65		
	• principal ICD-9-CM diagnosis codes 960.xx-979.xx with secondary		
	ICD-9-CM diagnosis codes 291.xx–292.xx or 303.xx–305.xx		
	Exclude visits where the principal diagnosis is dental related (ICD-9 codes		

⁴ These exclusions need to be reviewed or revisited. Beacon-CSI does not have them. These include outpatient and inpatient psychotherapy (which can be associated with admissions outside of mental health and chemical dependency); it also includes 90862, which is pharmacologic mgmt.

⁵ Specifications for Beacon-CSI use do not have these exclusions (94.26 and 94.27 for electroshock treatment; 94.6

alcohol and drug rehab/detox).

	$520.xx-525.xx)^6$.		
	Exclude interim billing codes 112, 113, 114, 122, 123, 124.		
	Exclude admissions with UB revenue codes 0112, 0114, 0116, 0122, 0124, 0126, 0132, 0134, 0136, 0142, 0144, 0146, 0152, 0154, 0156, 0170–0179, 0720–0729.		
Denominator Exceptions Details	None		
Numerator			
Numerator Statement	Number of discharges included in the denominator with an admission to an acute care hospital within the 30 days after discharge, excluding admissions related to pregnancy, dental health, mental health and chemical dependency services.		
Numerator Details	Include readmissions to acute care hospitals only. Exclude admissions where the principal diagnosis is any of the following pregnancy-related ICD-9 codes: • Complications of Pregnancy, Childbirth, and the Puerperium (630.xx–679.xx) • Newborn (Perinatal) Guidelines (760.xx–779.xx) • V20.xx Health supervision of infant or child • V22.xx Normal pregnancy • V23.xx Supervision of high-risk pregnancy • V24.xx Postpartum care and evaluation • V27.xx Outcome of delivery • V28.xx Antenatal screening • V29.xx Observation and evaluation of newborns for suspected condition not found • V30.xx–V39.xx Liveborn infant according to type of birth Exclude admissions where the principal diagnosis is for mental health purposes or the visit is related to chemical dependency, as defined by		
	 CPT codes 90801–90899⁸ principal ICD-9-CM diagnosis codes 290.xx–316.xx ICD-9-CM procedure code 94.26, 94.27 or 94.6⁹ principal ICD-9-CM diagnosis codes 960.xx–979.xx with secondary 		

 ⁶ Specifications for Beacon-CSI use do not have these exclusions.
 ⁷ Specifications for Beacon-CSI use specifies UB bill types to include (11x, 12x, 41x) instead of listing UB bill types to exclude. End result is slightly different.

⁸ These exclusions need to be reviewed or revisited. Beacon-CSI does not have them. These include outpatient and inpatient psychotherapy (which can be associated with admissions outside of mental health and chemical dependency); it also includes 90862, which is pharmacologic mgmt.

⁹ Specifications for Beacon-CSI use do not have these exclusions (94.26 and 94.27 for electroshock treatment; 94.6 alcohol and drug rehab/detox).

ICD-9-CM diagnosis codes 291.xx-292.xx or 303.xx-305.xx

Exclude visits where the principal diagnosis is dental related (ICD-9 codes $520.xx-525.xx)^{10}$.

Exclude interim billing codes 112, 113, 114, 122, 123, 124.

Exclude admissions with UB revenue codes 0112, 0114, 0116, 0122, 0124, 0126, 0132, 0134, 0136, 0142, 0144, 0146, 0152, 0154, 0156, 0170-0179, $0720 - 0729.^{11}$

Risk Adjustment

Risk adjustment strategy will be implemented in the next iteration of this measure.

Sampling

No sampling

Specifications for Beacon-CSI use do not have these exclusions.
 Specifications for Beacon-CSI use specifies UB bill types to include (11x, 12x, 41x) instead of listing UB bill types to exclude. End result is slightly different.

Exhibit 1: Readmission chain description

Inpatient stay #1	Inpatient stay #2	Inpatient stay #3	Inpatient stay #4
2/15/2009 2/28/2009	3/3/2009 3/5/2009	3/31/2009 4/7/2009	6/30/2009 7/3/2009

HEDIS measure:

IP stay #1: Index admission #1

IP stay #2: Excluded as an Index admission due to discharge (2/28/09) in 30 days prior to admission date (3/3/09); Counts as a readmission to Index admission #1

IP stay #3: Excluded as an Index admission due to discharge (3/5/09) in 30 days prior to admission date (3/31/09)

IP stay #4: Index admission #2

Revised measure:

IP stay #1: Index admission #1

IP stay #2: Counts as both Index admission #2 and a readmission to Index admission #1 $\,$

IP stay #3: Counts as both Index admission #3 and a readmission to Index admission #2

IP stay #4: Index admission #4



Measure Specification: Emergency Department Visits: Preventable

Measure Set ID	#3	Version Number	3
Version Effective Date	September 1, 2013	Date Endorsed	
Care Setting	Emergency Department	Unit of Measurement	Percentage of visits and 1,000 member months
Measurement Duration	Quarterly	Measurement Period	January 1, 2012 – December 31, 2014
Measure Type	Outcome	Measure Scoring	Percentage and Rate/1,000 member months
Payer source	Commercial claims initially	Improvement notation	Higher rates indicate poorer quality
Origin of Measure	National Committee for Quality Assurance (NCQA). HEDIS® 2011: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2010. Various pages.		
Measure description	Modifications done in accordance with the CSI working group consensus. The percentage of ED visits that are classified as preventable in adults ages 18		
References	years and older. NYU Center for Health and Public Service Research. NYU ED Algorithm. http://wagner.nyu.edu/chpsr/ RAND working paper: "Developing an Efficiency Measurement Approach to Assess Hospital Readmissions, Ambulatory Care Sensitive Admissions, and Preventable Emergency Department Visits: A Resource Guide for Beacon Communities and Other Community Collaboratives."		
Release Notes/ Summary of Changes	V2: Added second denominator for reporting number of visits per 1,000 member months. Changed to including all patients with at least one day of coverage in the denominator instead of only including patients covered for the full quarter. Clarified that the denominator includes "all RI residents and non-RI residents attributed to an RI provider." Removed denominator exclusion "Exclude patients who are attributed to out-of-state providers." Added "weighted by the number of days covered / number of days in the quarter" to the numerator details for denominator #2. V3: Removed restriction of "adults ages 18 years and older" since children will now be included in the rates. Removed "weighted by the number of days covered / number of days in the quarter" from the numerator details. Extended measurement period.		

Technical Specific	ations		
Target Population	Members with an ED visit. Each ED visit is assigned to categories of "Non-Emergent," "Emergent/Primary Care Treatable," "Emergent—ED Care Needed—Preventable/Avoidable," and "Emergent—ED Care Needed—Not Preventable/Avoidable."		
Denominator #1			
Denominator #1 Statement	Number of ED visits excluding visits that lead to admissions or observation stays and any visits for pregnancy, dental services, mental health, or chemical dependency services.		
	Number of ED visits for all RI residents and non-RI residents attributed to an RI provider who were covered for at least one day.		
Denominator #1 Details	If there are multiple visits on the same date, use the first visit. ED visits are identified by at least one of the following 1: • CPT codes 99281–99285 with UB Revenue codes 045x, 0981 • CPT codes 10040–69979 with POS 23 • HCPCS codes G0380–G0385 ²		
Denominator #1 Exceptions and Exclusions	 Exclude ED visits occurring on the same day as an admission or the day before an admission.³ Exclude ED visits occurring on the same day as an observation stay or the day before an observation stay.⁴ Observational stays are identified as UB revenue code 0760 (general classification category) or 0762 (observation room); and HCPCS code G0378 (hospital observation service, per hour) or G0379 (direct admission of patient for hospital observation care).⁵ Exclude visits where the principal diagnosis is any of the following pregnancy related ICD-9 codes⁶: Complications of Pregnancy, Childbirth, and the Puerperium (630.xx–679.xx) Newborn (Perinatal) Guidelines (760.xx–779.xx) 		

¹ Specifications for Beacon-CSI use has items grouped differently (The codes are there, but the grouping may make a difference):

[•] CPT codes 99281–99285 and POS = 23

[•] CPT codes 10040–69979 and POS = 23

[•] UB rev codes 0450, 0451, 0452, 0459, 0981 and POS = 23

² These are not included in the specifications for Beacon-CSI use.

³ Specifications for Beacon-CSI use are inconsistent on this point. In one place it indicates same day or day before, but in another place it says just the same day. Same goes for observation stay.

⁴ Specifications for Beacon-CSI use define observation stays as revenue codes of 760, 761, 762, 769. Specifications for Beacon-CSI use also indicates, "Exclude claims with a day bed code" with no specific codes listed.

⁵ We currently are not counting revenue codes 0761 and 0769 as observation stays because they may be treatment rooms and not true observation stays. Claims with CPT codes 99217–99220 are also not counted as observation stays.

⁶ Specifications for Beacon-CSI use do not have these exclusions.

	 V20.xx Health supervision of infant or child 		
	V22.xx Normal pregnancy		
	 V23.xx Supervision of high-risk pregnancy 		
	 V24.xx Postpartum care and evaluation 		
	V27.xx Outcome of delivery		
	V28.xx Antenatal screening		
	 V29.xx Observation and evaluation of newborns for suspected condition not found 		
	V30.xx –V39.xx Liveborn infant according to type of birth		
	Exclude visits where the principal diagnosis is for mental health purposes or the visit is related to chemical dependency, as defined by ⁷ • CPT codes 90801–90899		
	 principal ICD-9-CM diagnosis codes 290.xx –326.xx ICD-9-CM procedure code 94.26, 94.27, or 94.6 		
	 principal ICD-9-CM diagnosis codes 960.xx –979.xx with secondary ICD-9-CM diagnosis codes 291.xx –292.xx or 303.xx –305.xx. 		
	Exclude visits where the principal diagnosis is dental related (ICD-9 codes 520.xx –525.xx) ⁸ .		
Denominator #1 Exceptions Details	See above.		
Denominator #2			
Denominator #2 Statement	1,000 member months.		
Denominator #2 Details	Include all RI residents and non-RI residents attributed to an RI provider who were covered for at least one day, weighted by the number of days covered / number of days in the quarter.		
Denominator #2 Exceptions and Exclusions	Exclude patients if not covered at any time during the quarter.		
Denominator #2 Exceptions Details	None		
Numerator			
Numerator Statement	Sum of the proportions "Non-Emergent," "Emergent/Primary Care Treatable," and "Emergent—ED Care Needed—Preventable/Avoidable" assigned to each visit.		
Numerator Details	SAS code downloaded from http://wagner.nyu.edu/chpsr/		
Risk Adjustment			
Risk adjustment not plan	ned at this time.		
Sampling			
No sampling			
110 bumping			

⁷ Specifications for Beacon-CSI use do not have these exclusions. ⁸ Specifications for Beacon-CSI use do not have these exclusions.



Measure Specification:

Observation Stays: All Cause

Measure Set ID	#7	Version Number	1
Version Effective Date	September 1, 2013	Date Endorsed	
Care Setting	Emergency Department	Unit of Measurement	1,000 member months
Measurement Duration	Quarterly	Measurement Period	April 1, 2009– March 31, 2013
Measure Type	Outcome	Measure Scoring	Rate/1,000 member months
Payer source	Commercial claims initially	Improvement notation	Higher rates indicate poorer quality
Origin of Measure	National Committee for Quality Assurance (NCQA). HEDIS® 2011: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2010. Various pages. Modifications done in accordance with the Beacon-CSI working group consensus		
Measure description	The number of observation stays per 1,000 member months, excluding visits that lead to admissions and any visits for pregnancy, mental health, or chemical dependency services.		
References	National Committee for Quality Assurance (NCQA). HEDIS® 2011: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2010. Various pages. RAND working paper: "Developing an Efficiency Measurement Approach to Assess Hospital Readmissions, Ambulatory Care Sensitive Admissions, and Preventable Emergency Department Visits: A Resource Guide for Beacon Communities and Other Community Collaboratives." http://qualitymeasures.ahrq.gov/content.aspx?id=34130&search=emergency+department https://www.bluecrossma.com/staticcontent/npi_docs/UB_04FormLocatorAppendices.pdf Coffey RM, Barrett ML, Steiner S. Final Report Observation Status Related to Hospital Records. 2002. HCUP Methods Series Report #2002-3. ONLINE September 27, 2002. Agency for Healthcare Research and Quality. Available: http://www.hcup-us.ahrq.gov.		

Release Notes/ Summary of		
Changes		

Technical Specific	ations		
Target Population	Any member with an observation stay.		
Denominator			
Denominator Statement	1,000 member months.		
Denominator Details	Include all RI residents and non-RI residents attributed to an RI provider who were covered for at least one day, weighted by the number of days covered / number of days in the quarter.		
Denominator Exceptions and Exclusions	Exclude members if not covered at any time during the quarter.		
Denominator Exceptions Details	None		
Numerator			
Numerator Statement	The number of observation stays, excluding visits that lead to admissions and any visits for pregnancy, dental health, mental health, or chemical dependency services.		
Numerator Details	 Observation stays are identified as¹ UB revenue code 0760 (general classification category) or 0762 (observation room); and HCPCS code G0378 (hospital observation service, per hour) or G0379 (direct admission of patient for hospital observation care).² Multiple observation stays on same date count as only one stay. Exclude observation stays occurring on the same day as an admission or the day before an admission.³ Exclude visits where the principal diagnosis is any of the following pregnancy related ICD-9 codes⁴: Complications of Pregnancy, Childbirth, and the Puerperium (630.xx–679.xx) Newborn (Perinatal) Guidelines (760.xx–779.xx) V20.xx Health supervision of infant or child 		

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¹ Specifications for Beacon-CSI use define observation stays as revenue codes of 760, 761, 762, 769. Specifications for Beacon-CSI use also indicates, "Exclude claims with a day bed code" with no specific codes listed.

² We currently are not counting revenue codes 0761 and 0769 as observation stays because they may be treatment rooms and not true observation stays. Claims with CPT codes 99217–99220 are also not counted as observation stays.

³ Specifications for Beacon-CSI use are inconsistent on this point. In one place it indicates same day or day before, but in another place it says just the same day. Same goes for observation stay.

⁴ Specifications for Beacon-CSI use do not have these exclusions.

- V22.xx Normal pregnancy
- V23.xx Supervision of high-risk pregnancy
- V24.xx Postpartum care and evaluation
- V27.xx Outcome of delivery
- V28.xx Antenatal screening
- V29.xx Observation and evaluation of newborns for suspected condition not found
- V30.xx–V39.xx Liveborn infant according to type of birth

Exclude visits where the principal diagnosis is for mental health purposes or the visit is related to chemical dependency, as defined by⁵

- CPT codes 90801–90899
- principal ICD-9-CM diagnosis codes 290.xx–326.xx
- ICD-9-CM procedure code 94.26, 94.27, or 94.6
- principal ICD-9-CM diagnosis codes 960.xx-979.xx with secondary ICD-9-CM diagnosis codes 291.xx-292.xx or 303.xx-305.xx.

Exclude visits where the principal diagnosis is dental related (ICD-9 codes 520.xx–525.xx).⁶

Risk Adjustment

Risk adjustment strategy to be determined and incorporated into Round 2.

Sampling

No sampling; patients assigned to practices according to the Beacon-CSI attribution methodology.

⁵ Specifications for Beacon-CSI use do not have these exclusions.

⁶ Specifications for Beacon-CSI use do not have these exclusions.



Measure Specification:

Hospital Admissions: Behavioral Health

Measure Set ID	#9	Version Number	2
Version Effective Date	August 27, 2014	Date Endorsed	
Care Setting	Hospital	Unit of Measurement	1,000 member months
Measurement Duration	Quarterly	Measurement Period	January 1, 2012 – December 31, 2014
Measure Type	Outcome	Measure Scoring	Rate/1,000 member months
Payer source	Commercial claims initially	Improvement notation	Higher rates indicate poorer quality
Origin of Measure			
Measure description	Number of acute-care hospital admissions for mental health and chemical dependency services, excluding any admissions for pregnancy or dental health, per 1,000 member months in adults ages 18 years and older.		
References			
Release Notes/ Summary of Changes	V2: Added acute-care hospita	l restriction.	

Technical Specifications		
Target Population	Members with a mental health or chemical dependency acute-care hospital admission.	
Denominator		
Denominator Statement	1,000 member months	
Denominator Details	Include all RI residents and non-RI residents attributed to an RI provider who were covered for at least one day, weighted by the number of days covered / number of days in the quarter.	
Denominator Exceptions and Exclusions	Exclude patients if not covered at any time during the quarter.	
Denominator Exceptions Details	None	
Numerator		
Numerator Statement Number of acute-care hospital admissions for mental health or chemical dependency services, excluding any admissions for pregnancy or dental health or chemical dependency services.		
Numerator Details	Count transfers or embedded stays from an acute care hospitals to other	

facilities as one admission. Use the principal diagnosis and revenue codes from the first admission for inclusion purposes.

Include only admissions to acute-care hospitals (place of service=21).

Include admissions where the principal diagnosis is for mental health purposes or the visit is related to chemical dependency, as defined by

- CPT codes 90801–90899¹
- principal ICD-9-CM diagnosis codes 290.xx-316.xx
- ICD-9-CM procedure code 94.26, 94.27 or 94.6
- principal ICD-9-CM diagnosis codes 960.xx–979.xx with secondary ICD-9-CM diagnosis codes 291.xx–292.xx or 303.xx–305.xx

Exclude admissions where the principal diagnosis is any of the following pregnancy-related ICD-9 codes:

- Complications of Pregnancy, Childbirth, and the Puerperium (630.xx–679.xx)
- Newborn (Perinatal) Guidelines (760.xx–779.xx)
- V20.xx Health supervision of infant or child
- V22.xx Normal pregnancy
- V23.xx Supervision of high-risk pregnancy
- V24.xx Postpartum care and evaluation
- V27.xx Outcome of delivery
- V28.xx Antenatal screening
- V29.xx Observation and evaluation of newborns for suspected condition not found
- V30.xx–V39.xx Liveborn infant according to type of birth

Exclude visits where the principal diagnosis is dental related (ICD-9 codes 520.xx–525.xx).

Exclude interim billing codes 112, 113, 114, 122, 123, 124.

Exclude admissions with UB revenue codes 0112, 0114, 0116, 0122, 0124, 0126, 0132, 0134, 0136, 0142, 0144, 0146, 0152, 0154, 0156, 0170–0179, 0720–0729.²

¹ These include outpatient and inpatient psychotherapy (which can be associated with admissions outside of mental health and chemical dependency); it also includes 90862, which is pharmacologic mgmt.

² Specifications for CSI use specifies UB bill types to include (11x, 12x, 41x) instead of listing UB bill types to exclude. End result is slightly different.



Measure Specification:

Emergency Department Visits: Behavioral Health

Measure Set ID	#8	Version Number	1
Version Effective Date	April 15, 2014	Date Endorsed	
Care Setting	Emergency Department	Unit of Measurement	1,000 member months
Measurement Duration	Quarterly	Measurement Period	January 1, 2012 – December 31, 2014
Measure Type	Outcome	Measure Scoring	Rate/1,000 member months
Payer source	Commercial claims initially	Improvement notation	Higher rates indicate poorer quality
Origin of Measure			
Measure description	The number of ED visits for mental health or chemical dependency services, excluding any visits for pregnancy or dental health per 1,000 member months.		
References			
Release Notes/ Summary of Changes			

Technical Specifications						
Target Population	Members with a mental health or chemical dependency ED visit.					
Denominator						
Denominator Statement	1,000 member months.					
Denominator Details	Include all RI residents and non-RI residents attributed to an RI provider who were covered for at least one day, weighted by the number of days covered / number of days in the quarter.					
Denominator Exceptions and Exclusions	Exclude patients if not covered at any time during the quarter.					
Denominator Exceptions Details	None					
Numerator						
Numerator Statement	The number of ED visits for mental health or chemical dependency services, excluding any visits for pregnancy or dental health.					
Numerator Details	Count each ED visit not leading to an admission or observation stay as one					

visit.

Multiple visits on same date count as only one visit.

ED visits are identified by at least one of the following¹:

- CPT codes 99281–99285 with UB revenue codes 045x, 0981
- CPT codes 10040–69979 with POS 23.
- HCPCS codes G0380–G0385.²

Exclude ED visits occurring on the same day as an admission or the day before an admission.³

Exclude ED visits occurring on the same day as an observation stay or the day before an observation stay. 4 Observational stays are identified as

- UB revenue code 0760 (general classification category) or 0762 (observation room); and
- HCPCS code G0378 (hospital observation service, per hour) or G0379 (direct admission of patient for hospital observation care).⁵

Only include visits where the principal diagnosis is for mental health purposes or the visit is related to chemical dependency, as defined by

- CPT codes 90801–90899
- principal ICD-9-CM diagnosis codes 290.xx-326.xx
- ICD-9-CM procedure code 94.26, 94.27, or 94.6
- principal ICD-9-CM diagnosis codes 960.xx–979.xx with secondary ICD-9-CM diagnosis codes 291.xx–292.xx or 303.xx–305.xx.

Exclude admissions where the principal diagnosis is any of the following pregnancy-related ICD-9 codes:

- Complications of Pregnancy, Childbirth, and the Puerperium (630.xx–679.xx)
- Newborn (Perinatal) Guidelines (760.xx–779.xx)
- V20.xx Health supervision of infant or child
- V22.xx Normal pregnancy

¹ Specifications for CSI use has items grouped differently (The codes are there, but the grouping may make a difference):

[•] CPT codes 99281–99285 and POS = 23

[•] CPT codes 10040–69979 and POS = 23

[•] UB rev codes 0450, 0451, 0452, 0459, 0981 and POS = 23

² These are not included in the specifications for CSI use.

³ Specifications for CSI use are inconsistent on this point. In one place it indicates same day or day before, but in another place it says just the same day. Same goes for observation stay.

⁴ Specifications for CSI use define observation stays as revenue codes of 760, 761, 762, 769. Specifications for CSI use also indicates, "Exclude claims with a day bed code" with no specific codes listed.

⁵ We currently are not counting revenue codes 0761 and 0769 as observation stays because they may be treatment rooms and not true observation stays. Claims with CPT codes 99217–99220 are also not counted as observation stays.

- V23.xx Supervision of high-risk pregnancy
- V24.xx Postpartum care and evaluation
- V27.xx Outcome of delivery
- V28.xx Antenatal screening
- V29.xx Observation and evaluation of newborns for suspected condition not found
- V30.xx–V39.xx Liveborn infant according to type of birth

Exclude visits where the principal diagnosis is dental related (ICD-9 codes 520.xx–525.xx).

<u>APPENDIX 6 – BI TOOL QUALITY ASSURANCE REPORT METRICS</u>

Type	Metrics
Summary Statistics:	Total covered lives by health insurer, age, race, sex, ethnicity, county and
Demographics/Access	% in PCMHs; Payment arrangements by provider
Summary Statistics:	Total covered lives by insurance type, coverage level, age, sex, county
Coverage	
Summary Statistics:	Beneficiaries by program, age, sex, county. # of beneficiaries: dually
Medicaid	eligible; receiving long-term care, covered by add'l commercial
	insurance (TPL) with breakdown by age, sex, county. Dually eligibles by
	type (i.e. Medicare Part A only), age, sex, county
Summary Statistics:	# of Medicare beneficiaries and % in Medicare Advantage plan with
Medicare	breakdown of age, sex, and county
Summary Statistics:	% of plans purchased through HSRI with breakdown of age, sex, and
HSRI	county; HSRI plans by plan tier and market type (i.e. SHOP) with
	breakdown of age, sex, and county.
Summary Statistics:	% of claims/prescriptions filled by mail-order pharmacy and out-of-
Pharmacy Claims	network, by insurer, sex, age, county; city/state distribution of
	pharmacies where prescriptions are filled by health insurer; top 10
	prescription drugs; average dispensing fee, copay, coinsurance,
	deductible of these drugs, by health insurer.
Summary Statistics:	Total medical claims submitted by age, sex, and county; Top 10
Inpatient and Outpatient	admitting, principal, secondary diagnoses, and procedures; Average
Claims and Procedures	charge, amount paid, co-pay, coinsurance, and deductible for procedures,
	by health insurer/by member; Utilization of healthcare services per
	1,000: ambulatory care and ED visits, including "admitted for
	observation" vs. "short stay"
Summary Statistics:	# of providers by entity type (i.e. professional group, retail site); # of
Providers	providers by entity code (i.e. urgent care, nursing home); City/state
	distribution of providers, by health insurer

Appendix 7A: Cost Proposal Template

INSTRUCTIONS:

Fill out Appendix 7B: Project Staffing worksheet prior to completing Appendix 7A: Cost Proposal Template. Personnel costs will be populated using values from Appendix 7B: Project Staffing Worksheet. Only add costs to those cells not shaded in grey. Cells shaded in grey will auto-populate.

Total Project Costs (January 1, 2017-December 31, 2018)

Total Project Costs (January 1, 2017-December 51, 2016)			Year 1 (January 1, 2017-December 31, 2017)			(January 1, 2018-December 3			
Domain	Task	Personnel Costs	Other Costs±	Subtotal Year 1	Personnel Costs	Other Costs±	Subtotal Year 2		
DOMAIN ON	1A: Transition Planning	\$ -		\$ -	\$ -	\$ -	\$ -		
DOWAIN ON	1B: Project Management and Documentation	\$ -		\$ -	\$ -	\$ -	\$ -		
			Domain One, Yr 1 Subtota	l \$ -		Domain One, Yr 2 Subtota	l \$ -	\$ - 0	Domain One: Total Costs
					_			<u> </u>	
		Ι 4	<u> </u>		1 4			1	
DOMAIN TWO	2A: Opt-Out Portal Hosting and Operations	\$ -	-	\$ -	\$ -	-	\$ -		
	2B: Master Patient Index	\$ -	-	\$ -	\$ -	\$ -	\$ -	_	
			Domain Two, Yr 1 Subtota	\$ -		Domain Two, Yr 2 Subtota	I \$ -	ļ\$ - <u></u> C	Domain Two: Total Costs
	T							1	
	3A: Data Collection and Aggregation								
	Cost for every 10 additional data submission								
DOMAIN	feeds beyond minimum of 20								
THREE	,	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
	3B: Data Infrastructure and Enhancement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
	3C: Data Extracts and Analytic Support	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
			Domain Three, Yr 1 Subtota	\$ -		Domain Three, Yr 2 Subtota	l \$ -	\$ - [Domain Three: Total Cost
DOMANN	Lan Division in	1 4	<u> </u>					1	
DOMAIN	4A: BI Tool Mapping	\$ - \$ -	-	\$ -	\$ -	\$ -	\$ -		
FOUR	4B: Technical Support	\$ -	> -	\$ -	\$ -	\$ -	\$ -	,	
			Domain Four, Yr 1 Subtota	\$ -		Domain Four, Yr 2 Subtota	I \$ -	\$ - 0	Domain Four: Total Costs
		Total	Year 1 Implementation Costs	\$ -	Total	Year 2 Implementation Costs	\$ -	1	
				T			Ŧ	1	
						Total Implementation Costs	\$ -	1	
							T		

Appendix 7B: Project Staffing Worksheet - Hours by Domain

INSTRUCTIONS:

Complete Appendix 7B: Project Staffing Worksheet, prior to completing Appendix 7A: Cost Proposal Template. Personnel costs from the staffing worksheet will auto-populate into Appendix 7A. Only add costs to those cells not shaded in grey. Cells shaded in grey will auto-populate.

				Year 1 (Jan 1, 2017-Dec 31, 2017)		Year 2 (Jan 1, 2018-Dec 31, 2018)	
			Fully-Loaded				
Domain	Role	Name	Hourly Rate±	Task 1A	Task 1B	Task 1A	Task 1B
			\$ -				
			\$ -				
			\$ -				
			\$ -				
			\$ -				
DOMAIN			\$ -				
ONE			\$ -				
			\$ -				
			\$ -				
			\$ -				
			\$ -				
			\$ -				
		Total Hours	0	0	0	0	
		Tot	al Personnel Costs	\$ -	\$ -	\$ -	\$ -

Í			Year 1 (Jan 1, 2017-Dec 31, 2017)		Year 2 (Jan 1, 2018-Deember 31, 201		
			Fully-Loaded			Ì	
Domain	Role	Name	Hourly Rate±	Task 2A	Task 2B	Task 2A	Task 2B
			\$ -				
			\$ -				
			\$ -				
			\$ -				
			\$ -				
DOMAIN			\$ -				
TWO			\$ -				
			\$ -				
			\$ -				
			\$ -				
			\$ -				
			\$ -				
	Total Hours			0	0	0	0
	Total Personnel Costs				\$ -	\$ -	\$ -

				Year 1 (Jan 1, 2017-Dec 31, 2017)		Year 2 (Jan 1, 2018-Dec 31, 2018)			
			Fully-Loaded						
Domain	Role	Name	Hourly Rate±	Task 3A	Task 3B	Task 3C	Task 3A	Task 3B	Task 3C
			\$ -						
			\$ -						
			\$ -						
			\$ -						
			\$ -						
DOMAIN			\$ -						
THREE			\$ -						
			\$ -						
			\$ -						
			\$ -						
			\$ -						
			\$ -						
		•	Total Hours	0	0	0	0	0	0
		Tot	al Personnel Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

				Year 1 (Jan 1, 2017-Dec 31, 2017)		Year 2 (Jan 1, 2018-Dec 31, 2018)		
			Fully-Loaded					
Domain	Role	Name	Hourly Rate±	Task 4A	Task 4B	Task 4A	Task 4B	
			\$ -					
			\$ -					
			\$ -					
			\$ -					
			\$ -					
DOMAIN			\$ -					
FOUR			\$ -					
			\$ -					
			\$ -					
			\$ -					
			\$ -					
			\$ -					
	•	•	Total Hour	s 0	0	0	0	
		Tot	al Personnel Cost	s \$ -	\$ -	\$ -	\$ -	

 $[\]pm$ Fully Loaded Rates should include fringe benefits, administrative, and overhead costs.